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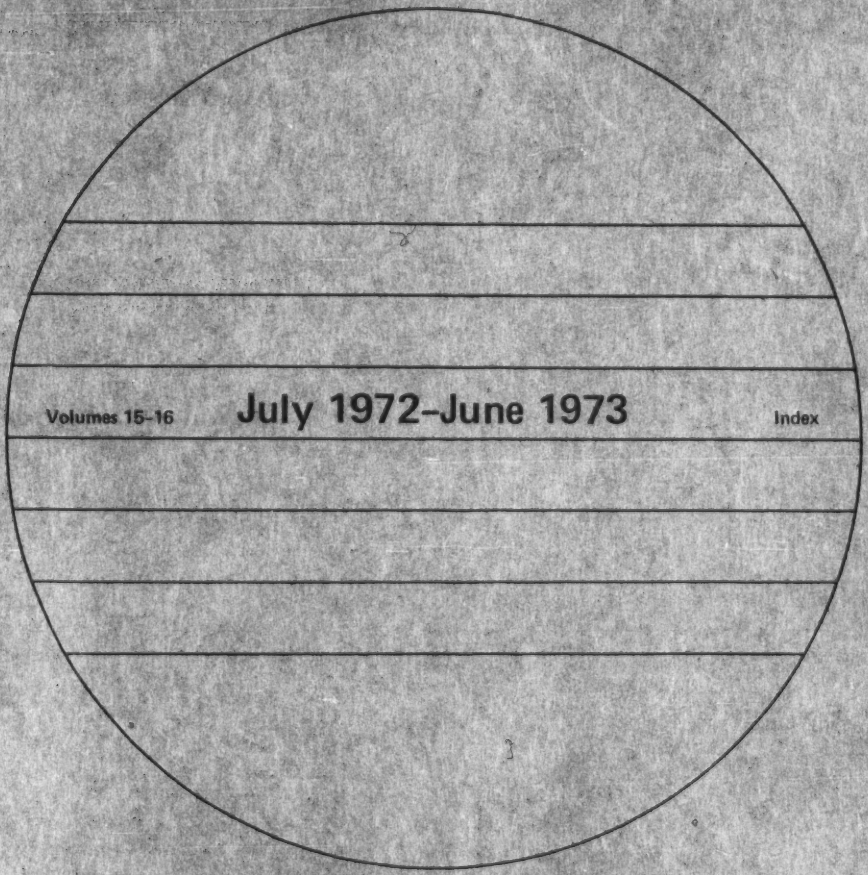

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One More Version of the Absorptive One Pion Exchange Model (T)—V. N. Guzhavin and N. S. Dubovikov. 15(2), 198–202 (Aug. 1972); CPM-7210C1459

Model of Reggeized One-Pion Exchange and the $pp\rightarrow pn\pi^+$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskiĭ and L. A. Ponomarev. 15(2), 203–8 (Aug. 1972); CPM-7210C1464

Multiparticle Production in High Energy Collisions (T)—É. V. Shuryak. 16(2), 220–5 (Feb. 1973); CPM-7304E0323

Absorptive Model and the Reactions $\pi^-p\rightarrow\varphi^0p$ and $\pi^-p\rightarrow\varphi^0n$ at a Momentum 3.25 GeV/c (T)—V. M. Guzhavin and M. S. Dubovikov. 16(2), 229–31 (Feb. 1973); CPM-7304E0332

Pole (in t) Parametrization of the Signature Factor and the Optical Model (T)—M. S. Dubovikov. 16(3), 316–9 (Mar. 1973); CPM-7306D0412

Absorption Model and Spin Parity of the B Meson (T)—V. M. Guzhavin and M. S. Dubovikov. 16(3), 320–2 (Mar. 1973); CPM-7306D0416

Inverse Problem in Complex λ Plane in the Presence of Coulomb Interaction with Allowance for Absorption (T)—V. V. Malyarov and I. V. Poplavskiĭ. 16(4), 483–5 (Apr. 1973); CPM-7309D1199

2.10.40.30. Potential Models

Connection of the Total Cross Section with the Diffraction Peak of Elastic Scattering (T)—V. I. Savrin, S. V. Semenov, N. E. Tyurin and O. A. Khrustalev. 16(2), 214–6 (Feb. 1973); CPM-7304E0317

2.10.40.40. Peripheral Models and One-Particle Exchange

One More Version of the Absorptive One Pion Exchange Model (T)—V. N. Guzhavin and N. S. Dubovikov. 15(2), 198–202 (Aug. 1972); CPM-7210C1459

Analysis of the $np\rightarrow pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaidalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Dynamic Model for the 33 Phase Shift of πN Scattering (T)—A. N. Vall, Yu. H. Kafiev and V. V. Serebryakov. 16(1), 106–8 (Jan. 1973); CPM-7304E0210

Absorptive Model and the Reactions $\pi^-p\rightarrow\varphi^0p$ and $\pi^-p\rightarrow\varphi^0n$ at a Momentum 3.25 GeV/c (T)—V. M. Guzhavin and M. S. Dubovikov. 16(2), 229–31 (Feb. 1973); CPM-7304E0332

Absorption Model and Spin Parity of the B Meson (T)—V. M. Guzhavin and M. S. Dubovikov. 16(3), 320–2 (Mar. 1973); CPM-7306D0416

pN→NNKK Reactions in Models with Single-Kaon Exchange (T)—V. B. Kopeliovich. 16(3), 323–5 (Mar. 1973); CPM-7306D0419

Electromagnetic Mechanism of Inelastic Hadron Collision at High Energies (T)—S. G. Matinyan, N. L. Ter-Isaakyan, V. A. Khoze and Yu. G. Shakhnazaryan. 16(4), 440–4 (Apr. 1973); CPM-7309D1156

2.10.40.80. Veneziano-Type Models

t-Channel Contribution to Pion-Nucleon Backward Scattering (T)—A. I. Lendel and V. I. Lend'el. 15(1), 79–82 (Jul. 1972); CPM-7209C1031

Dual Resonance Model for Non-Identical Regge Trajectories: N-Reggeon Vertex (T)—É. V. Gedalin. 15(1), 83–6 (Jul. 1972); CPM-7209C1035

Introduction of Noncommuting Operators into Trajectories of Dual Models (T)—A. A. Ansel'm, G. S. Danilov and I. T. Dyatlov. 15 (1), 87–92 (Jul. 1972); CPM-7209C1039
Unitarization of the Veneziano Model and the Pomeron Problem (T)—L. V. Laperashvili. 15(3), 317–21 (Sep. 1972); CPM-7211A1946
Production of a Spin-J Resonance in the Dual Resonance Model (T)—L. V. Laperashvili and M. G. Safro. 15(5), 567–70 (Nov. 1972); CPM-7302E0093
NN→3π Annihilation in Dual Models (T)—A. I. Bugrii, L. L. Enkovskii and N. A. Kobylinskii. 15(6), 699–701 (Dec. 1972); CPM-7302E0225
Analysis of a Dual Fermion Model (T)—S. N. Manida and V. A. Franke. 16(4), 429–32 (Apr. 1973); CPM-7309D1145
Application of the Methods of Statistical Mechanics to Dual Resonance Models (T)—G. P. Demchenko, V. V. Kukhtin and B. V. Struminskii. 16(5), 511–3 (May 1973); CPM-7309D1227

2.10.45. Models of Weak Interactions

2.10.45.15. Neutral Current

Erratum: Neutral Currents and the Limit of Validity of the Theory of Weak Interactions [6, 603 (,4)] (T)—B. L. Ioffe and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070
The Role of Corrections to the Weak Interaction in the K→l+l- and K→πl+l- Decays (T)—E. P. Shabalin. 16(2), 204–8 (Feb. 1973); CPM-7304E0307
Tensor Constant of Weak Interaction Current of the Second Kind (T)—V. I. Lisin and G. A. Lobov. 16(3), 353–4(L) (Mar. 1973); CPM-7306D0449

2.10.45.90. Other Topics in Models of Weak Interactions

Shrinkage Singularities and Asymptotic Behavior of the Weak Interaction Cross Section (T)—A. D. Dolgov, V. I. Zakharov and L. B. Okun'. 15(4), 451–6 (Oct. 1972); CPM-7212D1996
Possible Effect of Diagonalization of High-Energy Electromagnetic Interactions with Respect to Particle Helicities (T)—E. M. Lipmanov and N. V. Mikheev. 16(6), 682–5 (Jun. 1973); CPM-7310E1530

2.20. ELEMENTARY-PARTICLE PROCESSES

2.20.05. Weak and Electromagnetic Interactions of Leptons

Pair Production at Large Angles in Colliding-Beam Experiments (T)—V. N. Baier and V. S. Fadin. 15(1), 56–8 (Jul. 1972); CPM-7209C1008
Erratum: "Direct Production of Lepton Pairs by a Neutrino Beam in the Electromagnetic Field of a Nucleus [3, 497 (,4)] (T)—M. S. Marinov, Yu. P. Nikitin, Yu. P. Orevkov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070
On the Decay Mode μ+→e+νeν̄μe+e- (T)—D. Yu. Bardin, Ts. G. Istatkov and G. B. Mitsel'makher. 15(2), 161–2 (Aug. 1972); CPM-7210C1422
General Form of Cross Sections and Polarization Effects for Electromagnetic and Weak Processes (T)—A. P. Rekalo. 15(3), 300–3 (Sep. 1972); CPM-7211A1929
Muon Pair Production in μp Collisions (E)—M. N. Kobrinskii and F. F. Tikhonin. 15(6), 685–6 (Dec. 1972); CPM-7302E0211
Induced Emission of Electrons in Plane Electromagnetic Waves (T)—I. M. Ternov and V. R. Khalilov. 16(1), 94–8 (Jan. 1973); CPM-7304E0198
Neutrino Electromagnetic and Weak Interactions and the Process l-+l+→ν+ν̄+γ (T)—A. P. Rekalo. 16(3), 309–10 (Mar. 1973); CPM-7306D0405
Production of C-Even Resonances in Colliding ee Beams. Allowance for the Geometry of the Experiment in Two-Particle Decays (T)—A. K. Slivkov and Sh. M. Shvartsman. 16(4), 445–8 (Apr. 1973); CPM-7309D1161
Production of Electron and Muon Pairs in Colliding e-e- and e-e+ Pairs (T)—E. A. Kuraev and L. N. Lipatov. 16(5), 584–91 (May 1973); CPM-7309D1300
Polarization Effects in Weak Interactions of Colliding e+e- and e-e- Beams at High Energies (T)—G. V. Grigoryan and V. A. Khoze. 16(5), 592–6 (May 1973); CPM-7309D1308

2.20.10. Leptonic Decays of Mesons

2.20.10.15. π Decays

Measurement of the Mean Life of the π+ Meson by an Oscillographic Method (E)—A. F. Dunaitsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388
The Sign of the π0→2γ Electromagnetic Decay Constant (T)—M. V. Terent'ev. 16(5), 576–9 (May 1973); CPM-7309D1292

2.20.10.20. K Decays

K13 Decays and Chiral Symmetry Breaking (T)—B. A. Magradze, M. N. Tsugulea and M. A. Eliashvili. 15(3), 294–5 (Sep. 1972); CPM-7211A1923
Possible CPT-Breaking Effects and the Decay KL→2μ (T)—E. B. Bogomol'ny, A. D. Dolgov, V. I. Zakharov, L. B. Okun' and M. V. Terent'ev. 15(5), 549–53 (Nov. 1972); CPM-7302E0075
Electromagnetic Interaction of the Muon and the KL→2μ Decay (T)—G. V. Grigoryan, N. N. Nikolaev and L. B. Okun'. 15(5), 554–5 (Nov. 1972); CPM-7302E0080
Atomic Decays of K0L Mesons (T)—L. L. Nemenov. 16(1), 67–9 (Jan. 1973); CPM-7304E0171
The K0L→μ+μ- Decay and a Possible Anomalous Muon-Hadron Interaction (T)—E. B. Bogomol'nyĭ, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304B0174
The K0L→μμ̄ Decay and the Anomalous 2πγ-2μ Interaction (T)—M. A. Shifman and N. Zh. Shmatikov. 16(1), 77–9 (Jan. 1973); CPM-7304E0181
Contribution of the π+π-γ Intermediate State to the Absorptive Part of the K0L→μμ̄ Decay Amplitude (T)—A. D. Dolgov, M. A. Shifman and M. Zh. Shmatikov. 16(1), 80–1 (Jan. 1973); CPM-7304E0184
The Role of Corrections to the Weak Interaction in the K→l+l- and K→πl+l- Decays (T)—E. P. Shabalin. 16(2), 204–8 (Feb. 1973); CPM-7304E0307
KL→2μ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312
Quantum Theory Without the Superposition Principle (T)—I. S. Shapiro. 16(6), 727–32 (Jun. 1973); CPM-731QE1575

2.20.15. Hadronic Decays of Mesons

Study of the Reaction π-+p→n+mγ (m≤3) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424
The Reaction πp→π-π+n at pπ=4.45 BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427
Measurement of the Branching Ratio Γ(KL→3π0)/Γ(KL→π+π-π0) (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

2.20.20. Decays of Baryons

Single Hyperon Production and Weak Decays of the 3/2+ Decuplet.—N. N. Nikolaev. 15(5), 547–8 (Nov. 1972); CPM-7302E0073

2.20.25. Electromagnetic Processes and Properties of Hadrons

2.20.25.15. Electromagnetic Mass Differences

Calculation of the Electromagnetic Mass Difference of Pions in Chiral Dynamics (T)—A. N. Ivanov. 15(1), 64–70 (Jul. 1972); CPM-7209C1016
Current Algebra and the Problem of Cancellation of the Divergences in the Isotopic ΔT=2 Mass Differences (T)—A. B. Kaganovich. 15(5), 561–4 (Nov. 1972); CPM-7302E0087

The Reaction $\gamma+\gamma\to\pi^-+\pi$ and the Pion Electromagnetic Mass Difference (T)—P. S. Isaev and V. I. Khleskov. 16(5), 559–64 (May 1973); CPM-7309D1275

2.20.25.20. Electromagnetic Form Factors, Electric and Magnetic Moments

Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

The Decays $\eta\to\pi^+\pi^-\gamma$, $\eta\to 2\gamma$ and $\eta\to\pi^+\pi^-\gamma\gamma$ and the Form Factor of the Vector Current in K_{l4} Decay (T)—V. V. Solov'ev and M. V. Terent'ev. 16(1), 82–6 (Jan. 1973); CPM-7304E0186

Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^-p\to e^+e^-n$ at $E_{kin}=275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Electromagnetic Corrections to the Weak Hadron Form Factor (T)—L. L. Frankfurt. 16(6), 695–9 (Jun. 1973); CPM-7310E1543

2.20.25.30. Electromagnetic Decays

Study of the Reaction $\pi^-+p\to n+m\gamma$ ($m\leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskii, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskii, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Atomic Decays of Elementary Particles (T)—L. L. Nemenov. 15(5), 582–4 (Nov. 1972); CPM-7302E0108

Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskii, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

The Decays $\eta\to\pi^+\pi^-\gamma$, $\eta\to 2\gamma$ and $\eta\to\pi^+\pi^-\gamma\gamma$ and the Form Factor of the Vector Current in K_{l4} Decay (T)—V. V. Solov'ev and M. V. Terent'ev. 16(1), 82–6 (Jan. 1973); CPM-7304E0186

Pion Polarizability, Virtual Compton Effect, and the Decay $\pi\to e\nu\gamma$ (T)—M. V. Terent'ev. 16(1), 87–93 (Jan. 1973); CPM-7304E0191

$K_L\to 2\mu$ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312

The Radiative Decays π (K) $\to l\nu\gamma$ (T)—D. Yu. Bardin and S. M. Bilen'kii. 16(3), 311–5 (Mar. 1973); CPM-7306D0407

2.20.25.40. Electromagnetic Corrections to Strong- and Weak-Interaction Processes

Radiation Corrections to the ep Scattering Cross Section at Small Angles with Detection of the Recoil Proton (T)—A. P. Vanzha, S. R. Gevorkyan and A. V. Tarasov. 16(2), 199–200 (Feb. 1973); CPM-7304E0302

Production of C-Even Resonances in Colliding ee Beams. Allowance for the Geometry of the Experiment in Two-Particle Decays (T)—A. K. Slivkov and Sh. M. Shvartsman. 16(4), 445–8 (Apr. 1973); CPM-7309D1161

Electromagnetic Effects in Expolarization in Meson–Nucleon Scattering (T)—A. P. Vanzha, L. I. Lapidus and A. V. Tarasov. 16(5), 565–70 (May 1973); CPM-7309D1281

2.20.30. Compton Scattering and Lepton Scattering by Hadrons

Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu+Z\to\mu^-+W^++Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W^+ Boson in the Reaction $\nu+Z\to\mu^-+Z+W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Deep Inelastic ep Scattering in Perturbation Theory (T)—V. N. Gribov and L. N. Lipatov. 15(4), 438–50 (Oct. 1972); CPM-7212D1983

Fixed Pole in the Virtual Compton–Effect Amplitude (T)—Yu. A. Rakov and V. A. Tsarev. 15(5), 574–5 (Nov. 1972); CPM-7302E0100

The $K^0_L\to\mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyi, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

The $K^0_L\to\mu\bar{\mu}$ Decay and the Anomalous $2\pi\gamma$–2μ Interaction (T)—M. A. Shifman and N. Zh. Shmatikov. 16(1), 77–9 (Jan. 1973); CPM-7304E0181

Radiation Corrections to the ep Scattering Cross Section at Small Angles with Detection of the Recoil Proton (T)—A. P. Vanzha, S. R. Gevorkyan and A. V. Tarasov. 16(2), 199–200 (Feb. 1973); CPM-7304E0302

Muon Production in the Process $\nu_\mu+N\to\mu^-+W^++N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskii, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

Derivation of the Adler and Cabibbo–Radicati Sum Rules and Calculation of the Asymptotics of the Difference between the Cross Sections for the Scattering of Neutrinos and Anti-Neutrinos on Polarized Hadrons (T)—L. L. Frankfurt. 16(6), 690–4 (Jun. 1973); CPM-7310E1538

2.20.35. Hadron Photo- and Lepto-Production

2.20.35.20. Meson Production

Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

Recoil–Nucleon Polarization in Pion Photoproduction and Electroproduction (T)—A. S. Omelaenko. 15(3), 304–6 (Sep. 1972); CPM-7211A1933

Photoproduction of π^0 Mesons from Nucleons in the Complex Regge Pole Model (T)—N. P. Zotov, Yu. A. Rakov and V. A. Tsarev. 15(3), 307–8 (Sep. 1972); CPM-7211A1936

Dispersion Relations and Data on the Reaction $\gamma n\to p\pi^-$ in the 33 Resonance Region (T)—I. G. Aznauryan and A. N. Zaslavskii. 15(6), 696–8 (Dec. 1972); CPM-7302E0222

The $K^0_L\to\mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyi, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

Electroproduction of Strange Particles on Nucleons Near the Threshold (E)—I. V. Krive. 16(5), 556–8 (May 1973); CPM-7309D1272

The Reaction $\gamma+\gamma\to\pi^-+\pi$ and the Pion Electromagnetic Mass Difference (T)—P. S. Isaev and V. I. Khleskov. 16(5), 559–64 (May 1973); CPM-7309D1275

Nonlinear Lagrangian of Two-Photon Production of Soft Pions (T)—Yu. P. Malakyan. 16(5), 571–5 (May 1973); CPM-7309D1287

2.20.35.30. Meson Resonance Production

Noncoherent Photoproduction of Vector Mesons on Nuclei at Large Momentum Transfers (T)—S. R. Gevorkyan and A. V. Tarasov. 15(2), 141–2 (Aug. 1972); CPM-7210C1402

2.20.35.60. Baryon Resonance Production

($\pi\Delta$) Photoproduction on Protons at γ-Quantum Energies 0.6–1 GeV (E)—A. A. Zayats. 16(5), 597–601 (May 1973); CPM-7309D1313

2.20.35.90. Other Topics in Hadron Photo- and Lepto-Production

Electromagnetic Production of W-Meson Pairs (T)—N. L. Ter-Isaakyan and V. A. Khoze. 15(1), 51–5 (Jul. 1972); CPM-7209C1003

Multifermion Interactions (T)—S. S. Gershtein and V. N. Folomeshkin. 15(3), 296–9 (Sep. 1972); CPM-7211A1925

Parton Model for $\gamma\gamma$ Scattering (T)—L. I. Perlovskii and E. P. Kheifets. 15(4), 435–7 (Oct. 1972); CPM-7212D1980

Violation of Scale Invariance in Hadron Electroproduction Owing to the Cut Contribution (T)—Yu. M. Shabel'skii. 16(1), 103–5 (Jan. 1973); CPM-7304E0207

Certain Implications of Microcausality for the Matrix Element $\langle p|[A(x)B(0)]|p\rangle$ of the Commutator (T)—V. B. Geshkenbein. 16 (3), 340–2 (Mar. 1973); CPM-7306D0436

Observation of Double $\pi^+\pi^-$ Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

The Process $\nu_\mu + N \to \mu^- + W^+ + N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+ \to l^+ + \nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

2.20.40. Nucleon–Nucleon Interactions, Including Antinucleon, Deuteron, etc.

2.20.40.15. Low-Energy N–N Interactions

Determination of the Spin-Parity of the $X^0(960)$ Meson in Proton–Antiproton Annihilation at Rest (E)—L. E. Genina, A. N. Zaslavskiĭ and R. Lednicky. 15(5), 571–3 (Nov. 1972); CPM-7302E0097

Energy Dependence of Elastic Backward Scattering of Protons by Deuterons in the 360–670 MeV Range (E)—V. I. Komarov, G. E. Kozarev, G. P. Reshetnikov and O. V. Savchenko. 16(2), 129–33 (Feb. 1973); CPM-7304E0232

Sum Rules for Potential Scattering (T)—D. A. Kirzhnits and N. Zh. Takibaev. 16(2), 242–3(L) (Feb. 1973); CPM-7304E0345

2.20.40.20. High-Energy N–N Interactions

Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

Solution of Unitarity Condition with Modified Overlap Function (T)—G. G. Arushanov. 15(1), 74–8 (Jul. 1972); CPM-7209C1026

Calculations of Shadow Effects in Proton–Deuteron Collisions (T)—V. V. Anisovich, P. E. Volkovitskiĭ and L. G. Dakhno. 15(1), 97–9 (Jul. 1972); CPM-7209C1049

Spin Effects in Production of Quasinuclear Mesons by Antiprotons (T)—O. D. Dal'karov, V. B. Mandel'tsveig and V. A. Khangulyan. 15(1), 100–2 (Jul. 1972); CPM-7209C1052

Model of Reggeized One-Pion Exchange and the $pp \to pn\pi^+$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskiĭ and L. A. Ponomarev. 15(2), 203–8 (Aug. 1972); CPM-7210C1464

Empirical Formula for Pion and Kaon Spectra in pp Interactions (T)—V. N. Folomeshkin. 15(2), 214–8 (Aug. 1972); CPM-7210C1475

Analysis of the $np \to pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaidalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Phenomenological Study of Inclusive Single-Particle Spectra in the Triple Regge Limit (T)—G. Ranft and J. Ranft. 15(3), 314–6 (Sep. 1972); CPM-7211A1943

The Real Part of the Amplitude for Elastic pd-Scattering at an Energy of 70 GeV (E)—V. I. Zayachki, L. G. Khristov, Z. M. Zlatanov and P. A. Devenski. 15(5), 528–9 (Nov. 1972); CPM-7302E0054

Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Charged Particle Distribution in Inelastic Proton–Neutron Interactions at 19.2 GeV/c (E)—É. G. Boos, B. O. Zhautykov, E. S. Lukin, A. M. Mosienko and R. A. Tursunov. 16(2), 187–8 (Feb. 1973); CPM-7304E0290

$pN \to NNK\bar{K}$ Reactions in Models with Single-Kaon Exchange (T)—V. B. Kopeliovich. 16(3), 323–5 (Mar. 1973); CPM-7306D0419

Slope Parameter of Differential Elastic pp Scattering Cross Section (T)—Kh. M. Chernev. 16(4), 421–2 (Apr. 1973); CPM-7309D1137

Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaitsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

The Vavilov–Cerenkov Effect in the X-Ray Wavelength Region (T)—A. V. Kolpakov. 16(5), 554–5 (May 1973); CPM-7309D1270

Rescattering Effects in the pd→ppn Reaction (T)—B. M. Golovin, G. I. Lykasov, A. M. Rozanova and A. V. Tarasov. 16(5), 602–4 (May 1973); CPM-7309D1318

2.20.40.90. Other N–N Interactions

Partial Wave Analysis of NN and NM Scattering Amplitudes at High Energies (T)—G. I. Kuznetsov. 15(5), 576–81 (Nov. 1972); CPM-7302E0102

Determination of the Neutron–Neutron Scattering Length from the Reaction $\pi^- d \to 2n + \gamma$ (T)—G. M. Shklyarevskiĭ. 16(6), 700–4 (Jun. 1973); CPM-7310E1548

2.20.50. Pion–Baryon Interactions

2.20.50.15. Low-Energy π–N Interactions

Radiative Pion Capture by Hydrogen and Sign of Neutral Pion Decay Amplitude (E)—L. I. Lapidus and M. M. Musakhanov. 15(5), 558–60 (Nov. 1972); CPM-7302E0084

Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

2.20.50.20. High-Energy Elastic π–N Interactions

t-Channel Contribution to Pion–Nucleon Backward Scattering (T)—A. I. Lendel and V. I. Lend'el. 15(1), 79–82 (Jul. 1972); CPM-7209C1031

Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

2.20.50.30. High-Energy Inelastic π–N Interactions

Investigation of the Reaction $\pi^- p \to p\,p$ and $\pi^- p \to p^0 n$ at Incident Momentum 3–8 GeV/c by the Complex Angular Momentum Method (E)—V. N. Guzhavin, A. B. Kaidalov and A. F. Nilov. 15 (1), 93–6 (Jul. 1972); CPM-7209C1045

Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

The Reaction $\pi p \to \pi^- \pi^+ n$ at $p_\pi = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

K-Meson Charge Exchange and Factorization of the Effective Residues of Complex Poles (T)—N. P. Zotov, S. V. Tarasevich and V. A. Tsarev. 15(2), 209–10 (Aug. 1972); CPM-7210C1470

Investigation of $\pi^- + p \to n + 6\gamma$ Reaction at 2.94 GeV/c (E)—L. S. Novikov. 15(3), 276–7 (Sep. 1972); CPM-7211A1905

Total Cross Sections of the $\pi^+ p$ and $\pi^+ d$ Interactions in the Momentum Region 15–60 GeV/c and the Glauber Correction (E)—Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin and D. A. Stoyanova. 15(5), 530–3 (Nov. 1972); CPM-7302E0056

Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\,\pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutaidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Reactions of Single Σ and Λ Hyperon Production (E)—N. N. Nikolaev. 15(6), 687–90 (Dec. 1972); CPM-7302E0213

Dynamic Model for the 33 Phase Shift of πN Scattering (T)—A. N. Vall, Yu. H. Kafiev and V. V. Serebryakov. 16(1), 106–8 (Jan. 1973); CPM-7304E0210

Allowance for the Cuts on the Basis of the Regge Complex Pole Model (T)—N. P. Zotov and V. A. Tsarev. 16(2), 226–8 (Feb. 1973); CPM-7304E0329

Absorptive Model and the Reactions $\pi^- p \to p\, p$ and $\pi^- p \to p^0 n$ at a Momentum 3.25 GeV/c (T)—V. M. Guzhavin and M. S. Dubovikov. 16(2), 229–31 (Feb. 1973); CPM-7304E0332

Chiral Su(2) ×Su(2) Dynamics and the $\pi^+ p \to p^0 \Delta^{++}_{1236}$ Reaction Close to the Threshold (T/E)—A. N. Zaslavskiĭ and R. Lednicky. 16(2), 232–7 (Feb. 1973); CPM-7304E0335

$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_{\pi^-} = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Pole (in t) Parametrization of the Signature Factor and the Optical Model (T)—M. S. Dubovikov. 16(3), 316–9 (Mar. 1973); CPM-7306D0412

The Charge-Exchange Reaction $\pi^+ \pi^- \to \pi^0 \pi^0$ and the S Meson (E/T)—M. M. Makarov and V. V. Nelyubin. 16(4), 426–8 (Apr. 1973); CPM-7309D1142

Analysis of the Experimental Data on the Multiplicities of the Secondary Particles in π^-p, π^-n, and π^-C Collision at a Momentum 40 GeV/c (E)—Dubna. 16(5), 546–9 (May 1973); CPM-7309D1262

Lepton Pair Production Processes in Pion–Nucleon Interactions (T)—Yu. V. Kulish. 16(5), 605–10 (May 1973); CPM-7309D1321

Note Concerning the Symmetry of the Spectrum of the Longitudinal Pion Momenta in Semi-Inclusive π^-p Interactions at p=4 GeV/c (E)—V. G. Grishin, Sh. V. Inogamov, B. S. Yuldashev and G. Jancso. 16(5), 611–2 (May 1973); CPM-7309D1327

Determination of the Neutron–Neutron Scattering Length from the Reaction $\pi^- d \to 2n + \gamma$ (T)—G. M. Shklyarevskiĭ. 16(6), 700–4 (Jun. 1973); CPM-7310E1548

Model of the Partial-Wave Analysis of the Δ_{1236} Resonance Production Reactions $\pi N \to \pi\pi N$ Near Threshold with Allowance for the Triangle Graph Contribution (T)—S. A. Bunyatov, V. S. Kurbatov and A. K. Likhoded. 16(6), 705–8 (Jun. 1973); CPM-7310E1553

Estimate of the $\pi\pi$ Scattering Length a_0 by the Method of Separating the Triangle Graph Contribution in the Reactions $\pi N \to \pi\pi N$ (T/E)—S. A. Bunyatov, V. S. Kurbatov, A. K. Likhoded and H. M. Staudenmaier. 16(6), 709–12 (Jun. 1973); CPM-7310E1557

Quasithreshold Behavior of the Amplitude of the Process $\pi + N \to N + (\text{Virtual } \gamma)$ (T)—Yu. S. Surovtsev and F. G. Tkebuchava. 16(6), 713–4 (Jun. 1973); CPM-7310E1561

Continuous Sum Rules and Asymptotic Total πN Interaction Cross Sections (E)—Z. R. Babaev and V. S. Zamiralov. 16(6), 718–9 (Jun. 1973); CPM-7310E1566

Inclusive Production of Particles and Antiparticles in the Central Region of the Spectrum and Resonant πN Scattering (T/E)—L. É. Gendenshtein and A. B. Kaĭdalov. 16(6), 720–3 (Jun. 1973); CPM-7310E1568

2.20.50.90. Other Pion–Baryon Interactions

Remarks on the Nonuniqueness of the Effective Lagrangian in the Chiral SU(2) ⊗SU(2) Symmetry (T)—Van Hieu Nguyen. 15(5), 565–6 (Nov. 1972); CPM-7302E0091

Baryons and Pseudoscalar Mesons in Broken Nonlinear Chiral SU(3) ×SU(3) Dynamics (T)—M. I. Gaĭsak and V. Ya. Sabo. 16(1), 109–11 (Jan. 1973); CPM-7304E0213

2.20.55. Kaon–Baryon Interactions

K–Meson Charge Exchange and Factorization of the Effective Residues of Complex Poles (T)—N. P. Zotov, S. V. Tarasevich and V. A. Tsarev. 15(2), 209–10 (Aug. 1972); CPM-7210C1470

Relation between the KNΛ and KNΣ Coupling Constants and Bounds on Them (T)—O. V. Dumbrais. 16(3), 335–6 (Mar. 1973); CPM-7306D0431

2.20.60. Meson–Meson Interactions

2.20.60.20. π–π Interactions

The Reaction $\pi^- p \to \pi^- \pi^+ n$ at $p_{\pi^-} = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

Remarks on the Nonuniqueness of the Effective Lagrangian in the Chiral SU(2) ⊗SU(2) Symmetry (T)—Van Hieu Nguyen. 15(5), 565–6 (Nov. 1972); CPM-7302E0091

The Charge-Exchange Reaction $\pi^+ \pi^- \to \pi^0 \pi^0$ and the S Meson (E/T)—M. M. Makarov and V. V. Nelyubin. 16(4), 426–8 (Apr. 1973); CPM-7309D1142

2.20.60.90. Other Meson–Meson Interactions

Consequences of Broken SU(3) ×SU(3) Symmetry for Low Energy π K Scattering (T)—A. A. Afomian. 15(1), 71–3 (Jul. 1972); CPM-7209C1023

K–Matrix Model of Low-Energy πK Scattering (T)—A. A. Afonin. 15(3), 327–30 (Sep. 1972); CPM-7211A1956

Baryons and Pseudoscalar Mesons in Broken Nonlinear Chiral SU(3) ×SU(3) Dynamics (T)—M. I. Gaĭsak and V. Ya. Sabo. 16(1), 109–11 (Jan. 1973); CPM-7304E0213

2.20.65. Super–High–Energy Interactions

2.20.65.10. General

Possible Mass Anisotropy and Interaction of Ultra–High–Energy Particles with an Electromagnetic Field (T)—V. N. Sazonov. 15(5), 590–4 (Nov. 1972); CPM-7302E0116

Connection of the Total Cross Section with the Diffraction Peak of Elastic Scattering (T)—V. I. Savrin, S. V. Semenov, N. E. Tyurin and O. A. Khrustalev. 16(2), 214–6 (Feb. 1973); CPM-7304E0317

Connection between the Total Interaction Cross Section and the Slope of the Diffraction Peak (T)—A. B. Kaĭdalov. 16(2), 217–9 (Feb. 1973); CPM-7304E0320

2.20.65.90. Other Super–High–Energy Interactions

Production of a Spin–J Resonance in the Dual Resonance Model (T)—L. V. Laperashvili and M. G. Safro. 15(5), 567–70 (Nov. 1972); CPM-7302E0093

Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

2.20.90. Other Topics in Elementary–Particle Processes

Double Charge Exchange of π Mesons on Nuclei at High Energies (T)—S. R. Gevorkyan, A. V. Tarasov and Ch. Tséren. 15(1), 34–7 (Jul. 1972); CPM-7209C0986

Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

Structure of Observable Amplitudes for Photon – "Soft" Pion Interaction (E)—M. V. Terent'ev. 15(6), 665–74 (Dec. 1972); CPM-7302E0191

Interactions of 2.43–GeV/c Deuterons with Photographic Emulsion Nuclei (E)—E. Silesh, K. D. Tolstov, J. Tuček and G. S. Shabratova. 16(1), 57–9 (Jan. 1973); CPM-7304E0161

Ionization Loss of High–Energy Electrons (E)—A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov and P. N. Shareiko. 16(2), 189–90 (Feb. 1973); CPM-7304E0292

Coherent Production of Ω^- and Ξ Hyperons on Nuclei and the Determination of Their Spin and Parity (T)—B. Z. Kopeliovich. 16 (3), 326–31 (Mar. 1973); CPM-7306D0422

The Vavilov–Cerenkov Effect in the X–Ray Wavelength Region (T)—A. V. Kolpakov. 16(5), 554–5 (May 1973); CPM-7309D1270

2.30. EXPERIMENTS ON PROPERTIES OF SPECIFIC PARTICLES AND RESONANCES, AND STATUS OF FUNDAMENTAL LAWS

2.30.20. Mesons and Meson Resonances

2.30.20.15. π Mesons

Calculation of the Electromagnetic Mass Difference of Pions in Chiral Dynamics (T)—A. N. Ivanov. 15(1), 64–70 (Jul. 1972); CPM-7209C1016

Atomic Decays of Elementary Particles (T)—L. L. Nemenov. 15(5), 582–4 (Nov. 1972); CPM-7302E0108

Pion Polarizability, Virtual Compton Effect, and the Decay $\pi \to e\nu\gamma$ (T)—M. V. Terent'ev. 16(1), 87–93 (Jan. 1973); CPM-7304E0191

Measurement of the Mean Life of the π^+ Meson by an Oscillographic Method (E)—A. F. Dunaitsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388

Production of Slow Pions in Interactions between High Energy Particles and Nuclei (E)—N. I. Kostanashvili, G. I. Debedevich, D. S. Nabichvrishvili and G. I. Kharashvili. 16(5), 542–5 (May 1973); CPM-7309D1258

2.30.20.20. K Mesons

Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskii, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskii, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Atomic Decays of K^0_L Mesons (T)—L. L. Nemenov. 16(1), 67–9 (Jan. 1973); CPM-7304E0171

The $K^0_L \to \mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyi, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

The $K^0_L \to \mu\bar{\mu}$ Decay and the Anomalous $2\pi\gamma$–2μ Interaction (T)—M. A. Shifman and N. Zh. Shmatikov. 16(1), 77–9 (Jan. 1973); CPM-7304E0181

The Sign of the $\pi^0 \to 2\gamma$ Electromagnetic Decay Constant (T)—M. V. Terent'ev. 16(5), 576–9 (May 1973); CPM-7309D1292

2.30.20.50. ρ, ω and η Mesons

Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskii, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskii, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Investigation of $\pi^- + p \to n + 6\gamma$ Reaction at 2.94 GeV/c (E)—L. S. Novikov. 15(3), 276–7 (Sep. 1972); CPM-7211A1905

Atomic Decays of Elementary Particles (T)—L. L. Nemenov. 15(5), 582–4 (Nov. 1972); CPM-7302E0108

Dynamical Chiral Symmetry and Cancellation of Divergences in the Mass Differences of Members of the A_1, ρ and π Meson Isomultiplets (T)—A. B. Kaganovich. 15(6), 691–5 (Dec. 1972); CPM-7302E0217

The Decays $\eta \to \pi\pi\gamma$, $\eta \to 2\gamma$ and $\eta \to \pi\pi\gamma\gamma$ and the Form Factor of the Vector Current in K_{l4} Decay (T)—V. V. Solov'ev and M. V. Terent'ev. 16(1), 82–6 (Jan. 1973); CPM-7304E0186

$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_\pi = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

2.30.20.70. A_1, A_2 and B Mesons

Absorption Model and Spin Parity of the B Meson (T)—V. M. Guzhavin and M. S. Dubovikov. 16(3), 320–2 (Mar. 1973); CPM-7306D0416

2.30.20.90. Other Mesons and Meson Resonances

Spin Effects in Production of Quasinuclear Mesons by Antiprotons (T)—O. D. Dal'karov, V. B. Mandel'tsveig and V. A. Khangulyan. 15(1), 100–2 (Jul. 1972); CPM-7209C1052

The Reaction $\pi p \to \pi^- \pi^+ n$ at $p_\pi = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

Determination of the Spin–Parity of the $X^0(960)$ Meson in Proton–Antiproton Annihilation at Rest (E)—L. É. Genina, A. N. Zaslavskii and R. Lednicky. 15(5), 571–3 (Nov. 1972); CPM-7302E0097

Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskii, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

2.30.30. Baryons and Baryon Resonances

2.30.30.30. Baryon Resonances with S = 0

Dynamic Model for the 33 Phase Shift of πN Scattering (T)—A. N. Vall, Yu. H. Kafiev and V. V. Serebryakov. 16(1), 106–8 (Jan. 1973); CPM-7304E0210

Model of the Partial-Wave Analysis of the Δ_{1236} Resonance Production Reactions $\pi N \to \pi\pi N$ Near Threshold with Allowance for the Triangle Graph Contribution (T)—S. A. Bunyatov, V. S. Kurbatov and A. K. Likhoded. 16(6), 705–8 (Jun. 1973); CPM-7310E1553

2.30.30.40. Hyperons and Hyperon Resonances

Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskii, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

Single Hyperon Production and Weak Decays of the $3/2^+$ Decuplet. —N. N. Nikolaev. 15(5), 547–8 (Nov. 1972); CPM-7302E0073

Coherent Production of $\bar{\Omega}^-$ and Ξ Hyperons on Nuclei and the Determination of Their Spin and Parity (T)—B. Z. Kopeliovich. 16 (3), 326–31 (Mar. 1973); CPM-7306D0422

2.30.40. Leptons

On the Decay Mode $\mu^+ \to e^+\nu_e\bar{\nu}_\mu e^+e^-$ (T)—D. Yu. Bardin, Ts. G. Istatkov and G. B. Mitsel'makher. 15(2), 161–2 (Aug. 1972); CPM-7210C1422

On the Problem of Heavy Leptons (T)—S. S. Gershtein, L. G. Landsberg and V. N. Folomeshkin. 15(2), 195–7 (Aug. 1972); CPM-7210C1456

Electromagnetic Interaction of the Muon and the $K_L \to 2\mu$ Decay (T) —G. V. Grigoryan, N. N. Nikolaev and L. B. Okun'. 15(5), 554–5 (Nov. 1972); CPM-7302E0080

2.30.50. Hypothetical Particles

2.30.50.20. Intermediate Bosons

Electromagnetic Production of W-Meson Pairs (T)—N. L. Ter-Isaakyan and V. A. Khoze. 15(1), 51–5 (Jul. 1972); CPM-7209C1003

Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu + Z \to \mu^- + W^+ + Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W^+ Boson in the Reaction $\nu + Z \to \mu^- + Z + W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Current Algebra and the Problem of Cancellation of the Divergences in the Isotopic $\Delta T = 2$ Mass Differences (T)—A. B. Kaganovich. 15(5), 561–4 (Nov. 1972); CPM-7302E0087

Muon Production in the Process $\nu_\mu + N \to \mu^- + W^+ + N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskii, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

The Process $\nu_\mu + N \to \mu^- + W^+ + N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+ \to l^+ + \nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

2.30.50.90. Other Hypothetical Particles

On the Problem of Heavy Leptons (T)—S. S. Gershtein, L. G. Landsberg and V. N. Folomeshkin. 15(2), 195–7 (Aug. 1972); CPM-7210C1456

Some Comments on the Search for Quarks Using a 70 GeV Accelerator (T/E)—A. M. Zaitsev and L. G. Landsberg. 15(6), 656–64 (Dec. 1972); CPM-7302E0182

$K_L \to 2\mu$ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312

2.40. COSMIC RAYS

2.40.30. Secondary Cosmic Rays, Including Air Showers

Development of Superhigh-Energy Electron–Photon Showers in the Atmosphere (T)—D. D. Krasil'nikov, V. P. Kulakovskaya and S. I. Nikol'skiĭ. 15(1), 47–50 (Jul. 1972); CPM-7209C0999

Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Angular and Spatial Distributions of Particles of Electron–Photon Shower Particles (T)—V. V. Guzhavin, I. P. Ivanenko, A. A. Kirillov and Yu. P. Paskhalov. 15(3), 278–81 (Sep. 1972); CPM-7211A1907

Increase in the Transverse Momenta in Nuclear Interactions at Energies $\geq 10^{12}$ eV from EAS Data (E)—Yu. A. Fomin and G. B. Khristiansen. 15(4), 423–6 (Oct. 1972); CPM-7212D1968

Generation and Interaction of Muons with Energies $E_\mu \gtrsim 10^{13}$ eV (E)—G. B. Khristiansen, O. V. Vedenev and Yu. A. Nechin. 15(5), 538–42 (Nov. 1972); CPM-7302E0064

Influence of Single Scattering Processes on the Horizontal Fluxes of Cosmic Muons in Water (T)—A. T. Matachun, Yu. A. Trubkin and V. M. Fedorov. 16(2), 191–3 (Feb. 1973); CPM-7304E0294

Lateral Distribution of Electrons in an Inhomogeneous Atmosphere (T)—V. V. Guzhavin, I. P. Ivanenko and Yu. I. Paskhalov. 16(4), 417–20 (Apr. 1973); CPM-7309D1133

Analysis of Theoretical and Experimental Data on the Multiplicity of Shower Particles in High-Energy Hadron Interactions (R)—V. V. Avakyan, M. I. Keropyan and É. A. Mamidzhanyan. 16(4), 423–5 (Apr. 1973); CPM-7309D1139

2.40.90. Other Topics in Cosmic Rays

Analysis of Present Experimental Data on Ultra-high-energy Cosmic Rays (E)—G. V. Kulikov and G. V. Khristiansen. 15(4), 427–32 (Oct. 1972); CPM-7212D1972

Ultra-High-Energy Cosmic Rays and a Possible Generalization of Relativistic Theory (T)—D. A. Kirzhnits and V. A. Chechin. 15(5), 585–9 (Nov. 1972); CPM-7302E0111

Comparison of the Characteristics of the Interaction of Protons and Neutrons with C, Fe, and Pb Nuclei (E)—M. O. Azaryan, É. A. Mamidzhanyan, R. M. Martirosov and R. A. Suleĭmanov. 16(6), 678–81 (Jun. 1973); CPM-7310E1526

2.50. NUCLEAR STRUCTURE

2.50.10. Nuclear Properties

2.50.10.10. General Descriptive

A Model for the Equations of Nuclear Physics (T)—A. I. Baz' and M. V. Zhukov. 16(1), 31–7 (Jan. 1973); CPM-7304E0135

2.50.10.20. Masses, Binding Energies and Q Values

Measurements of Atomic Masses in the Region from Titanium to Iron (E)—R. A. Demirkhanov, V. V. Dorokhov and M. I. Dzkuya. 15(5), 475–8 (Nov. 1972); CPM-7302E0001

Generalized Method of Harmonic Polynomials (T)—A. M. Gorbatov. 16(4), 391–4 (Apr. 1973); CPM-7309D1107

Fission Barriers of Odd Nuclei (T)—G. D. Adeev and P. A. Cherdantsev. 16(5), 507–10 (May 1973); CPM-7309D1223

2.50.10.30. Radii, Shape, Charge and Mass Density Distributions

Nuclear Densities in the K–Harmonics Method (T)—A. P. Levich. 15(4), 404–5 (Oct. 1972); CPM-7212D1949

Method for the Calculation of the Nuclear Critical Charge (T)—V. S. Popov. 15(5), 595–600 (Nov. 1972); CPM-7302E0121

Calculation of Nuclear Deformation of the U(3(A–1)) Scheme Model (T)—A. Petrauskas, G. Kamuntavicius and K. Jankauskas. 16(2), 168–72 (Feb. 1973); CPM-7304E0271

Analysis of Elastic Electron Scattering on Light Nuclei on the Basis of Symmetrized Fermi–Density Distribution (E/T)—Yu. N. Eldyshev, V. N. Lukyanov and Yu. S. Pol. 16(3), 282–6 (Mar. 1973); CPM-7306D0378

Shapes of Heavy Nuclei (T)—A. V. Yushkov. 16(4), 380–1 (Apr. 1973); CPM-7309D1096

2.50.10.40. Spin, Parity and Isobaric Spin

Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Isobaric Configuration 0^+ States, Proton–Neutron Hole in a Spherical Nucleus (T)—Yu. V. Gaponov and Yu. S. Lyutostanskiĭ. 16(3), 270–6 (Mar. 1973); CPM-7306D0366

2.50.10.50. Electromagnetic Moments

Transition Toroidal Form Factors of Light Nuclei (T)—R. É. Bluvshtein, V. M. Dubovik and A. A. Cheshkov. 15(1), 59–63 (Jul. 1972); CPM-7209C1011

Magnetic Moments of Three-Particle Nuclei (T)—N. B. Krupennikova. 15(3), 260–1 (Sep. 1972); CPM-7211A1889

E2 Transition Probabilities in the Asymmetric Rigid Rotor Model (T)—E. V. Gaĭ and N. S. Rabotnov. 15(4), 396–8 (Oct. 1972); CPM-7212D1941

E2 Transitions and Quadrupole Moments of States with High Spin in the Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 16(1), 17–8 (Jan. 1973); CPM-7304E0121

Probabilities of E2 Transitions and Mean Values of Quadrupole Moments of High Spin States in the Asymmetric Top Model (T)—E. V. Gaĭ and N. S. Rabotnov. 16(2), 159–61 (Feb. 1973); CPM-7304E0262

Rigid Asymmetrical Rotator and Deformability of Nuclei (T)—A. D. Fedorov and V. A. Knyr. 16(4), 376–9 (Apr. 1973); CPM-7309D1092

Form Factors and Transition Densities of the Quadrupole and Octupole Vibrations of the C^{12} Nucleus (T)—I. S. Gul'karov. 16(4), 386–90 (Apr. 1973); CPM-7309D1102

Magnetic Moments of Highly Excited States of Atomic Nuclei (T)—V. V. Voronov and V. G. Solov'ev. 16(6), 653–6 (Jun. 1973); CPM-7310E1501

2.50.10.60. Level Density, Level Spacing and Level Structure

The Assymetric Rigid Rotator Model with Modified Moments of Inertia (T)—A. D. Fedorov. 15(1), 22–3 (Jul. 1972); CPM-7209C0974

E1 and E2 Transitions in Medium and Heavy Spherical Nuclei (E)—S. P. Kamerdzhiev. 15(4), 379–86 (Oct. 1972); CPM-7212D1924

Lifetime of the 2.734-MeV Level of Sr^{88} (E)—D. K. Kaipov, Yu. G. Kosyak, L. N. Smirin and Yu. K. Subnyi. 15(6), 603–4 (Dec. 1972); CPM-7302E0129

Radiation of p-Levels of Even–Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16(1), 1–5 (Jan. 1973); CPM-7304E0105

Spin Dependence of the Density of the Particle–Hole State of Atomic Nuclei in the Fermi–Gas Model (T)—Yu. V. Sokolov. 16(1), 14–6 (Jan. 1973); CPM-7304E0118

Level Density of Compound Nuclei with $A = 130$–200 and Other Nuclear Properties (E)—V. P. Vertebnyĭ, A. I. Kalchenko and M. V. Pasechnik. 16(1), 19–20 (Jan. 1973); CPM-7304E0123

Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Churšin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Density of Excited Particle Hole States in the Shell Model (E)—A. V. Ignatyuk and Yu. V. Sokolov. 16(2), 155–8 (Feb. 1973); CPM-7304E0258

2.50.20. Nuclear Forces, Effective Interactions

K–harmonics Method in the Few–nucleon Problem (T)—V. D. Éfros. 15(2), 128–36 (Aug. 1972); CPM-7210C1389

Matrix Elements for a Three Nucleon System in K–Harmonics Method (T)—V. V. Pustovalov. 15(4), 399–403 (Oct. 1972); CPM-7212D1944

Use of the K–Harmonics Method for Spin–Orbit Splitting Calculations of Light Nuclei (T)—A. I. Baz', A. M. Gorbatov, V. F. Demin, Yu. E. Pokrovskiĭ and Yu. K. Rogov. 16(2), 179–81 (Feb. 1973); CPM-7304E0282

2.50.30. Few Nucleon Systems

K–harmonics Method in the Few–nucleon Problem (T)—V. D. Éfros. 15(2), 128–36 (Aug. 1972); CPM-7210C1389

Magnetic Moments of Three–Particle Nuclei (T)—N. B. Krupennikova. 15(3), 260–1 (Sep. 1972); CPM-7211A1889

Short–Range Nucleon–Nucleon Repulsion and Low–Energy Three–Nucleon Parameters (T)—V. F. Kharchenko, S. A. Shadchin and S. A. Storozhenko. 15(5), 493–6 (Nov. 1972); CPM-7302E0019

Solution of the Skornyakov–Ter–Martirosyan Equations for Three Nucleons with Cutoff at Large Momenta (T)—V. F. Kharchenko. 16(2), 173–5 (Feb. 1973); CPM-7304E0276

Potential Harmonics in the Three–Body Problem (T)—V. V. Pustovalov. 16(2), 176–8 (Feb. 1973); CPM-7304E0279

2.50.40. Nuclear Structure Models and Methods

2.50.40.15. Shell Models

Influence of the Fractional Parentage Structure of the Ground State on the Photodisintegration of Light Nuclei (T)—N. G. Goncharova. 15(2), 137–40 (Aug. 1972); CPM-7210C1398

Derivation of Bohr–Mottelson Collective Model Equations on the Basis of the Many–Body Problem Hamiltonian (T)—A. Ya. Dzyublik, V. I. Ovcharenko, A. I. Steshenko and G. F. Filippov. 15(5), 487–92 (Nov. 1972); CPM-7302E0013

Density of Excited Particle Hole States in the Shell Model (E)—A. V. Ignatyuk and Yu. V. Sokolov. 16(2), 155–8 (Feb. 1973); CPM-7304E0258

Model of the Equations of Nuclear Physics. One Decay Channel (T)—A. I. Baz' and M. V. Zhukov. 16(5), 529–36 (May 1973); CPM-7309D1245

Parametrization of B(E2) Transitions in Deformed Even–Even Nuclei Within the Framework of the SU(3) Scheme (T/E)—P. P. Raichev. 16(6), 643–6 (Jun. 1973); CPM-7310E1491

2.50.40.20. Collective Models

The Assymetric Rigid Rotator Model with Modified Moments of Inertia (T)—A. D. Fedorov. 15(1), 22–3 (Jul. 1972); CPM-7209C0974

The Hydrodynamic Limit for Finite Fermi Systems (T)—B. A. Rumyantsev. 15(1), 28–30 (Jul. 1972); CPM-7209C0980

Nonadiabatic Theory of Rotational–Vibrational Excitations in Atomic Nuclei (T)—P. V. Skorobogatov. 15(2), 124–7 (Aug. 1972); CPM-7210C1385

High–Spin Levels of Even–Even Nuclei in a Phenomenological Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 15(3), 262–3 (Sep. 1972); CPM-7211A1891

Collective 0^+ and 2^+ States in Deformed Nuclei (T)—B. A. Rumyantsev and V. B. Telitsyn. 15(4), 387–91 (Oct. 1972); CPM-7212D1932

Davydov–Chaban Model Analog (T)—A. D. Fedorov. 15(4), 392–5 (Oct. 1972); CPM-7212D1937

Oscillations of a Fermi Liquid Drop and Giant Resonance in Medium and Heavy Nuclei (T)—I. A. Akhiezer, B. I. Barts and V. T. Lazurik–El'tsufin. 15(5), 484–6 (Nov. 1972); CPM-7302E0010

Derivation of Bohr–Mottelson Collective Model Equations on the Basis of the Many–Body Problem Hamiltonian (T)—A. Ya. Dzyublik, V. I. Ovcharenko, A. I. Steshenko and G. F. Filippov. 15(5), 487–92 (Nov. 1972); CPM-7302E0013

E2 Transitions and Quadrupole Moments of States with High Spin in the Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 16(1), 17–8 (Jan. 1973); CPM-7304E0121

Probabilities of E2 Transitions and Mean Values of Quadrupole Moments of High Spin States in the Asymmetric Top Model (T)—E. V. Gal and N. S. Rabotnov. 16(2), 159–61 (Feb. 1973); CPM-7304E0262

Calculation of Nuclear Deformation of the U(3(A–1)) Scheme Model (T)—A. Petrauskas, G. Kamuntavicius and K. Jankauskas. 16(2), 168–72 (Feb. 1973); CPM-7304E0271

Rotational Invariance, Moments of Inertia, and 1^+ States in Deformed Nuclei (T)—N. I. Pyatov and M. I. Chernei. 16(5), 514–8 (May 1973); CPM-7309D1230

Method of Generalized Density Matrix in the Theory of Collective Excitations (T)—S. T. Belyaev and V. G. Zelevinskiĭ. 16(6), 657–64 (Jun. 1973); CPM-7310E1505

2.50.40.30. Cluster Models

Elastic and Inelastic Glauber Scattering of Protons by C^{12} in the α–Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(1), 38–41 (Jan. 1973); CPM-7304E0142

Excitation of Nuclear Vibrational Levels by Electrons According to the α–Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(2), 182–4 (Feb. 1973); CPM-7304E0285

Investigation of the Cluster Structure of the Be^8 Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(4), 382–5 (Apr. 1973); CPM-7309D1098

The Cluster Model and the Structure of the C^{12} Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(5), 519–21 (May 1973); CPM-7309D1235

2.50.40.40. Microscopic Methods (e.g. Hartree–Fock and Random Phase)

On the Capability of Neutron Spectroscopy for the Study of Highly Excited States (Resonances) (T)—B. G. Solov'ev. 15(4), 410–5 (Oct. 1972); CPM-7212D1955

Influence of Spin and Quadrupole Interactions on the Properties of the State with $K^\pi = 1^+$ in Deformed Even–Even Nuclei (T)—V. M. Mikhaĭlov and V. V. Pogosyan. 16(2), 162–7 (Feb. 1973); CPM-7304E0265

2.50.40.90. Other Models and Methods

Spin Dependence of the Density of the Particle–Hole State of Atomic Nuclei in the Fermi–Gas Model (T)—Yu. V. Sokolov. 16(1), 14–6 (Jan. 1973); CPM-7304E0118

2.50.50. Experiments on Collective Motion in Nuclei

Excitation of Collective States of Some Medium Nuclei by 14–MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoĭ, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

2.50.60. Hypernuclei

Ratio of Nonmesonic and π^-–Decay Probabilities and the Depth of Potential Wells for Λ in Hypernuclei (T)—V. A. Filimonov. 15(2), 189–91 (Aug. 1972); CPM-7210C1450

Influence of Majorana Forces on the Properties of p–Shell Hypernuclei (T)—A. B. Kochetov and B. A. Khrylin. 16(1), 25–6 (Jan. 1973); CPM-7304E0129

2.55. NUCLEAR DECAY

2.55.20. Electromagnetic Transitions

2.55.20.10. General

Doorway States of "Phonon + Particle" Type in (n, γ) Reactions on N=28 and N=82 Nuclei (E)—V. A. Knat'ko and É. A. Rudak. 15(6), 626–8 (Dec. 1972); CPM-7302E0152

E2 Transitions and Quadrupole Moments of States with High Spin in the Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 16(1), 17–8 (Jan. 1973); CPM-7304E0121

Realization of the Physical Basis for Su(3) and the Probabilities of E1 Transitions in the Su(3) Formalism (T)—G. N. Afanas'ev, S. A. Abramov and P. P. Raichev. 16(1), 27–30 (Jan. 1973); CPM-7304E0131

Probabilities of E2 Transitions and Mean Values of Quadrupole Moments of High Spin States in the Asymmetric Top Model (T)—E. V. Gai and N. S. Rabotnov. 16(2), 159–61 (Feb. 1973); CPM-7304E0262

Influence of Spin and Quadrupole Interactions on the Properties of the State with $K^{\pi}=1^{+}$ in Deformed Even–Even Nuclei (T)—V. M. Mikhailov and V. V. Pogosyan. 16(2), 162–7 (Feb. 1973); CPM-7304E0265

2.55.20.20. Transitions in Nuclei with A ≤ 90

Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamaliĭ, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Transition Toroidal Form Factors of Light Nuclei (T)—R. É. Bluvshtein, V. M. Dubovik and A. A. Cheshkov. 15(1), 59–63 (Jul. 1972); CPM-7209C1011

Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al-Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15(6), 605–7 (Dec. 1972); CPM-7302E0131

Nonconservation of P-Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoĭ, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Radiation of p-Levels of Even–Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16(1), 1–5 (Jan. 1973); CPM-7304E0105

Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

2.55.20.30. Transitions in Nuclei with A ≥ 90

Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamaliĭ, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Neutron Resonances of Sm Isotopes (E)—E. N. Karzhavina and A. B. Popov. 15(3), 225–7 (Sep. 1972); CPM-7211A1854

Use of the Perturbed Angle $e_{conv}\gamma$ Correlation to Measure the Hg^{197} 133-keV State g-Factor (E)—N. D. Kornienko, B. G. Kul'Chinskiĭ, A. I. Levon and O. F. Nemets. 15(4), 353–6 (Oct. 1972); CPM-7212D1898

Angular Distribution of Low Energy Neutrons from Nuclear μ^- Capture in Sulfur and Calcium (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski, A. A. Nikolina and V. S. Roganov. 15(5), 523–5 (Nov. 1972); CPM-7302E0049

De-Excitation of Even–Odd Nuclei in the Range $91 \leq N \leq 113$ After Capturing Thermal Neutrons (T)—L. V. Groshev, A. M. Demidov and L. L. Sokolovskiĭ. 16(3), 245–8 (Mar. 1973); CPM-7306D0341

Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaĭtseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

2.55.20.40. Internal Conversion and Extranuclear Effects

Ratios of the Internal Conversion Coefficients for M4 Transitions in the Nuclei $Te^{121,123,125,127,129}$ (E)—R. A. Kalinauskas, K. V. Makaryunas and R. I. Davidonis. 15(4), 350–1 (Oct. 1972); CPM-7212D1895

2.55.30. β–Decay and Electron and Muon Capture

Conservation of the Isospin of Low-Lying Collective States of Heavy Nuclei (T)—E. A. Nersesov. 15(2), 121–3 (Aug. 1972); CPM-7210C1382

Neutron Channel in μ^- Capture and Short-Range Nucleon–Nucleon Correlations. The Reaction $\mu^- + He^4 H^3 + n + \nu$ (E)—Yu. A. Salganik and R. A. Éramzhyan. 15(3), 287–9 (Sep. 1972); CPM-7211A1916

Neutron Energy Spectrum from Absorption of Negative Muons by O, S, Ca, and Pb Nuclei (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski and V. S. Roganov. 15(6), 639–44 (Dec. 1972); CPM-7302E0165

Internal Bremsstrahlung Accompanying a Unique β Transition of Cs^{137} (E)—I. S. Batkin and Yu. G. Smirnov. 16(4), 405–6 (Apr. 1973); CPM-7309D1121

2.55.40. α–Decay

Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894

Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha_1\gamma)Mg^{24}$ for 6.40-MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chuprunov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Absolute Probabilities of the α Decay of Even–Even Nuclei with $174 \leq A \leq 232$ and Superfluidity (T)—S. G. Kadmenskiĭ, V. E. Kalechits and A. A. Martynov. 16(4), 400–4 (Apr. 1973); CPM-7309D1116

2.55.90. Other Topics in Nuclear Decay

Ratio of Nonmesonic and π^-–Decay Probabilities and the Depth of Potential Wells for Λ in Hypernuclei (T)—V. A. Filimonov. 15(2), 189–91 (Aug. 1972); CPM-7210C1450

Correlations of Identical Particles Emitted by Highly Excited Nuclei (T)—G. I. Kopylov and M. I. Podgoretskiĭ. 15(2), 219–23 (Aug. 1972); CPM-7210C1480

Partial Widths and Strong Coupling of Channels (T)—S. I. Grishanova, S. D. Nikedvin, N. N. Titarenko and E. L. Yadrovskiĭ. 15(3), 264–5 (Sep. 1972); CPM-7211A1893

A Model for the Equations of Nuclear Physics (T)—A. I. Baz' and M. V. Zhukov. 16(1), 31–7 (Jan. 1973); CPM-7304E0135

Measurement of Compound-Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

Experiments Aimed at Finding Proton Decay from the Ground State (E)—D. D. Bogdanov, V. P. Bochin, V. A. Karnaukhov and L. A. Petrov. 16(5), 491–6 (May 1973); CPM-7309D1207

2.60. NUCLEAR REACTIONS AND SCATTERING

2.60.10. Nuclear Reactions and Scattering in General

2.60.10.10. General Problems

Investigation of Particles Produced at 90° in the Laboratory Frame in Nucleus–Nucleus Interactions (T)—N. A. Marutyan. 15(6), 654–5 (Dec. 1972); CPM-7302E0180

Measurement of Compound-Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

2.60.10.20. Coupled-Channel Methods and Many-Body-Theory Methods

K-harmonics Method in the Few-nucleon Problem (T)—V. D. Efros. 15(2), 128–36 (Aug. 1972); CPM-7210C1389

Partial Widths and Strong Coupling of Channels (T)—S. I. Grishanova, S. D. Niledvin, N. N. Titarenko and E. L. Yadrovskiĭ. 15(3), 264–5 (Sep. 1972); CPM-7211A1893

Correlated Basis in the Problem of Several Nucleons (T)—Yu. I. Fenin and V. D. Efros. 15(5), 497–502 (Nov. 1972); CPM-7302E0023

A Model for the Equations of Nuclear Physics (T)—A. I. Baz' and M. V. Zhukov. 16(1), 31–7 (Jan. 1973); CPM-7304E0135

The Need for Taking into Account the Second-Order Terms of the Distorted Wave Method in the Three-Particle Scattering Problem (T)—V. S. Potapov. 16(1), 42–4 (Jan. 1973); CPM-7304E0146

The n-Body Problem. Matrix Elements of Permutations (T)—M. S. Kil'dyushov. 16(1), 117–9 (Jan. 1973); CPM-7304E0221

2.60.10.30. Plane-Wave and Distorted-Wave Born Approximations

Examination of Distorted Wave Method for Stripping Reactions to Resonant States (T)—V. E. Bunakov, K. A. Gridnev and L. V. Krasnov. 15(5), 508–12 (Nov. 1972); CPM-7302E0034

The Need for Taking into Account the Second-Order Terms of the Distorted Wave Method in the Three-Particle Scattering Problem (T)—V. S. Potapov. 16(1), 42–4 (Jan. 1973); CPM-7304E0146

2.60.10.40. Optical and Diffraction Models

Influence of Nonlocality on Inelastic α-Particle Scattering (T)—V. V. Tokarevskiĭ. 15(5), 503–7 (Nov. 1972); CPM-7302E0029

2.60.10.50. Statistical Theory and Fluctuations of Cross Sections

Theory of (γ,N) Reactions at Energies Above the Pion Production Thereshold (T)—I. A. Akheizer and B. I. Barts. 15(2), 143–6 (Aug. 1972); CPM-7210C1404

The Hauser–Feshbach Method for Many Particle–Nuclear Reactions (T)—A. E. Savel'ev. 15(2), 154–6 (Aug. 1972); CPM-7210C1415

Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Concerning the Description of Direct (n,2n) Processes in Some Nuclei (T)—S. N. Ezhov and V. S. Ol'khovskiĭ. 16(2), 185–6 (Feb. 1973); CPM-7304E0288

2.60.10.90. Other Topics

Correlations of Identical Particles Emitted by Highly Excited Nuclei (T)—G. I. Kopylov and M. I. Podgoretskiĭ. 15(2), 219–23 (Aug. 1972); CPM-7210C1480

Two Interacting Particles in a Potential Well (T)—A. B. Migdal. 16 (2), 238–41 (Feb. 1973); CPM-7304E0341

2.60.15. Resonances in Reactions and Scattering

Peripheral Model for a Stripping Reaction to a Resonant State (T)—P. O. Dzhamalov, E. I. Dolinskiĭ and A. M. Mukhamedzhanov. 15 (2), 147–53 (Aug. 1972); CPM-7210C1408

Neutron Resonances of Sm Isotopes (E)—E. N. Karzhavina and A. B. Popov. 15(3), 225–7 (Sep. 1972); CPM-7211A1854

Oscillations of a Fermi Liquid Drop and Giant Resonance in Medium and Heavy Nuclei (T)—I. A. Akhiezer, B. I. Barts and V. T. Lazurik-El'tsufin. 15(5), 484–6 (Nov. 1972); CPM-7302E0010

Nature of the Intermediate Structure of Dipole Analog Resonances (T)—F. A. Zhivopistsev and K. F. Shitikova. 16(1), 21–4 (Jan. 1973); CPM-7304E0125

Bound and Decaying States in the Theory of Resonance Nuclear Reactions (T)—A. A. Luk'yanov. 16(1), 45–9 (Jan. 1973); CPM-7304E0149

2.60.18. Polarization, Polarized Beams and Targets

Polarization Effects in (p, 2p) Reaction (T)—V. M. Kolybasov and N. Ya. Smorodinskaya. 15(3), 269–72 (Sep. 1972); CPM-7211A1898

Proton Polarization in Coulomb Stripping Reactions (T)—I. A. Gubkin. 15(5), 513–4 (Nov. 1972); CPM-7302E0039

Polarization Phenomena in Direct Reactions with Simple Diagrams Being Taken into Account (T)—I. Ots. 15(5), 515–9 (Nov. 1972); CPM-7302E0041

Dependence of Polarization Effects in Direct Nuclear Reactions on the Total Angular Momentum of an Exchanged Particle (T)—V. M. Kolybasov and V. A. Khangulyan. 15(5), 520–2 (Nov. 1972); CPM-7302E0046

Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Polarization of 1000-MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznyakov, O. Ya. Fedorov and A. V. Shvedchikov. 16(6), 628–30 (Jun. 1973); CPM-7310E1476

2.60.20. Nuclear Reactions and Scattering Involving only Few-Nucleon Systems ($A \leq 4$)

Analysis of the Proton Spectrum from the D(n,p)2n Reaction (E)—B. G. Skorodumov, M. P. Gol'dberg and Yu. N. Talanin. 15(3), 234–8 (Sep. 1972); CPM-7211A1863

Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Scattering of High-Energy Electrons by H^3 and He^3 Nuclei (T)—A. G. Sitenko, I. V. Kozlovskiĭ and V. K. Tartakovskiĭ. 15(4), 406–9 (Oct. 1972); CPM-7212D1951

Photodisintegration of He^4 into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Two-Particle Electrodisintegration of He^3 (T)—I. V. Kozlovskiĭ, V. K. Tartakovskiĭ and A. D. Foursat. 16(3), 277–81 (Mar. 1973); CPM-7306D0373

Analysis of Elastic Electron Scattering on Light Nuclei on the Basis of Symmetrized Fermi-Density Distribution (E/T)—Yu. N. Eldyshev, V. N. Lukyanov and Yu. S. Pol. 16(3), 282–6 (Mar. 1973); CPM-7306D0378

Two-Photon Exchange in Large-Angle Scattering of High-Energy Electrons by Light Nuclei (T)—V. N. Boĭtsov, L. A. Kondratyuk and V. B. Kopeliovich. 16(3), 287–91 (Mar. 1973); CPM-7306D0383

2.60.25. Photonuclear Reactions and Scattering ($A \geq 5$)

Influence of the Fractional Parentage Structure of the Ground State on the Photodisintegration of Light Nuclei (T)—N. G. Goncharova. 15(2), 137–40 (Aug. 1972); CPM-7210C1398

Noncoherent Photoproduction of Vector Mesons on Nuclei at Large Momentum Transfers (T)—S. R. Gevorkyan and A. V. Tarasov. 15 (2), 141–2 (Aug. 1972); CPM-7210C1402

Theory of (γ,N) Reactions at Energies Above the Pion Production Thereshold (T)—I. A. Akheizer and B. I. Barts. 15(2), 143–6 (Aug. 1972); CPM-7210C1404

Differential Cross Sections and Angular Distributions of γ Rays from the (n,n'γ) Reaction on Pr^{141} and Ho^{165} (E)—E. A. Andreev, S. P. Sit'ko and V. A. Shevchenko. 15(5), 479–81 (Nov. 1972); CPM-7302E0005

Measurement of the Excitation Energy of the Spontaneously Fissioning Isomer Pu^{239}(γ,n) (E)—Yu. P. Gangrskiĭ, V. N. Markov, I. F. Kharisov and Yu. M. Tsipenyuk. 16(2), 151–4 (Feb. 1973); CPM-7304E0254

Cascade Curves and Fluctuations of Average Characteristics of the Development of Showers Produced by 1600-MeV γ Quanta in Liquid Xenon (E)—B. Slowinski, Z. Strugalski and W. Hubert. 16 (4), 410–1 (Apr. 1973); CPM-7309D1126

Photoproduction of Single π^+ Mesons on Nuclei at $E^{-=2}$ and 3 GeV. The Parameters of the Proton–Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Photoproduction of Electron–Positron Pairs (T)—V. G. Zima. 16(5), 580–3 (May 1973); CPM-7309D1296

2.60.30. Nuclear Reactions Induced by Leptons ($A \geq 5$)

Dependence of the Electro–Excitation Cross Section of Some Light Nuclei on the Choice of the Coupling Scheme (T)—V. K. Tartakovskiĭ and A. V. Fursaev. 15(1), 31–3 (Jul. 1972); CPM-7209C0983

Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Inelastic Scattering of Electrons by Protons and Li^6 Nuclei (E)—Yu. I. Titov and E. V. Stepula. 15(4), 361–4 (Oct. 1972); CPM-7212D1906

Probability of (μ^-, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

Generation and Interaction of Muons with Energies $E_\mu \gtrsim 10^{12}$ eV (E)—G. B. Khristiansen, O. V. Vedenev and Yu. A. Nechin. 15(5), 538–42 (Nov. 1972); CPM-7302E0064

Cross Sections and Spectra of Particles Appearing in Processes with the Participation of Reactor Antineutrinos (T)—L. A. Mikaélyan and S. A. Fayans. 15(5), 543–6 (Nov. 1972); CPM-7302E0069

Deep Inelastic Lepton Pair Production in Neutrino Nucleus Scattering (T)—F. M. Lev. 15(5), 556–7 (Nov. 1972); CPM-7302E0082

Excitation of Nuclear Vibrational Levels by Electrons According to the α–Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(2), 182–4 (Feb. 1973); CPM-7304E0285

Analysis of Elastic Electron Scattering on Light Nuclei on the Basis of Symmetrized Fermi–Density Distribution (E/T)—Yu. N. Eldyshev, V. N. Lukyanov and Yu. S. Pol. 16(3), 282–6 (Mar. 1973); CPM-7306D0378

2.60.40. Nucleon–Induced Reactions and Scattering ($A \geq 5$)

2.60.40.10. General

On the Capability of Neutron Spectroscopy for the Study of Highly Excited States (Resonances) (T)—B. G. Solov'ev. 15(4), 410–5 (Oct. 1972); CPM-7212D1955

Mechanism of (n,p) and (n,α) Reactions on Light and Medium Nuclei (E/T)—A. E. Savel'ev, I. K. Averiyanov and B. M. Dzyuba. 15(4), 416–8 (Oct. 1972); CPM-7212D1961

2.60.40.20. Elastic Proton Scattering

Proton Elastic Scattering by Ca Nuclei in the Energy Region 5.0–6.4 MeV (E)—E. A. Romanovskiĭ, E. I. Sirotinin, T. I. Spasskaya, K. S. Shishkin and V. D. Aleshin. 15(4), 365–6 (Oct. 1972); CPM-7212D1910

Elastic and Inelastic Glauber Scattering of Protons by C^{12} in the α–Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(1), 38–41 (Jan. 1973); CPM-7304E0142

Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Polarization of 1000–MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznyakov, O. Ya. Fedorov and A. V. Shvedchikov. 16(6), 628–30 (Jun. 1973); CPM-7310E1476

2.60.40.30. Elastic Neutron Scattering

Excitation of Collective States of Some Medium Nuclei by 14–MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoĭ, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

Cross Sections of the Reactions $In^{113}(n,n')In^{113m}$ and $Rh^{103}(n,n')Rh^{103m}$ (E)—A. Pazsit and J. Csikai. 15(3), 232–3 (Sep. 1972); CPM-7211A1861

Angular Distributions of 13.7–MeV Neutrons Elastically Scattered by the Isotopes $Pb^{206,207,208}$ (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 369–71 (Oct. 1972); CPM-7212D1914

2.60.40.40. Inelastic Nucleon Scattering and (n,p) and (p,n) Reactions

Excitation of Collective States of Some Medium Nuclei by 14–MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoĭ, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

Polarization Effects in (p, 2p) Reaction (T)—V. M. Kolybasov and N. Ya. Smorodinskaya. 15(3), 269–72 (Sep. 1972); CPM-7211A1898

Mn^{54} Levels (E)—V. M. Mishchenko, A. I. Popov and V. E. Storizhko. 15(4), 343–6 (Oct. 1972); CPM-7212D1888

Inelastic Scattering of 13.7 MeV Neutrons by Lead Isotopes (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 372–4 (Oct. 1972); CPM-7212D1917

Be^6 and B^8 Levels from (p,n) Reactions (E)—U. R. Arifkhanov, M. Gulyamov, B. I. Islamov and É. Érgashov. 15(6), 610 (Dec. 1972); CPM-7302E0136

Elastic and Inelastic Glauber Scattering of Protons by C^{12} in the α–Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(1), 38–41 (Jan. 1973); CPM-7304E0142

Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

The $O^{16}(p, p\alpha)C^{12}$ Reaction with 50–MeV Protons (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 16(5), 497–8 (May 1973); CPM-7309D1213

2.60.40.50. (N,d), (N,t), (N,He^3) and (N,α) Reactions

Cross–Sections for (n,2n) Reactions on Ga, As, Sm, Gd for 14.1 MeV Neutrons (E)—D. V. Viktorov and V. L. Zyablin. 15(6), 608–9 (Dec. 1972); CPM-7302E0134

An Investigation of the (n, α) Reaction Between 4.9–MeV Neutrons and Light Nuclei of a Photographic Emulsion (E)—M. V. Kirichenko and Z. I. Solov'eva. 16(1), 9–10 (Jan. 1973); CPM-7304E0113

Excitation of 0^+ States in Two–Nucleon Transfer Reactions (E)—S. K. Abdulvagabova, S. P. Ivanova and N. I. Pyatov. 16(6), 665–9 (Jun. 1973); CPM-7310E1513

2.60.40.60. Radiative Capture

Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamaliĭ, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Sr^{87} and Zr^{93} Fluorescence after the Capture of Thermal Neutrons (E)—L. V. Groshev, L. I. Govor and A. M. Demidov. 15(4), 347–8 (Oct. 1972); CPM-7212D1892

De–Excitation of Even–Odd Nuclei in the Range $91 \lesssim N \lesssim 113$ After Capturing Thermal Neutrons (T)—L. V. Groshev, A. M. Demidov and L. L. Sokolovskiĭ. 16(3), 245–8 (Mar. 1973); CPM-7306D0341

P–Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

2.60.40.70. Reactions and Scattering at Energies $\geq$ 100 MeV

Elastic and Inelastic Glauber Scattering of Protons by C^{12} in the α–Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(1), 38–41 (Jan. 1973); CPM-7304E0142

Production of Slow Pions in Interactions between High Energy Particles and Nuclei (E)—N. I. Kostanashvili, G. I. Debedevich, D. S. Nabichvrishvili and G. I. Kharashvili. 16(5), 542–5 (May 1973); CPM-7309D1258

2.60.40.90. Other Topics in Nucleon-Induced Reactions

The Hauser–Feshbach Method for Many Particle–Nuclear Reactions (T)—A. E. Savel'ev. 15(2), 154–6 (Aug. 1972); CPM-7210C1415

Coherent Diffraction Production of Pions by Photons in Photoemulsion Nuclei (E)—Sh. Abduzhamilov, S. A. Azimov, N. Sh. Saidkhanov and V. M. Chudakov. 15(2), 169–75 (Aug. 1972); CPM-7210C1430

Investigation of (p,pd) -Reaction on Light Nuclei at 50 MeV (E)—V. V. Boikov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 15(3), 239–40 (Sep. 1972); CPM-7211A1868

Concerning the Description of Direct (n,2n) Processes in Some Nuclei (T)—S. N. Ezhov and V. S. Ol'khovskii. 16(2), 185–6 (Feb. 1973); CPM-7304E0288

2.60.50. H^2– and H^3–Induced Reactions and Scattering ($A \geq 5$)

Peripheral Model for a Stripping Reaction to a Resonant State (T)—P. O. Dzhamalov, E. I. Dolinskii and A. M. Mukhamedzhanov. 15 (2), 147–53 (Aug. 1972); CPM-7210C1408

Structure Factor of Elastic α–Particle and Deuteron Scattering for the Heavy–Particle Stripping Mechanism (T)—T. A. Dmitrieva and I. B. Teplov. 15(3), 266–8 (Sep. 1972); CPM-7211A1895

Backward Scattering of Deutrons by Light Nuclei (E)—V. A. Matusevich, V. A. Solov'ev and I. P. Chernov. 15(4), 375–6 (Oct. 1972); CPM-7212D1920

Proton Polarization in Coulomb Stripping Reactions (T)—I. A. Gubkin. 15(5), 513–4 (Nov. 1972); CPM-7302E0039

2.60.60. He^3– and α–Induced Reactions and Scattering($A \geq 5$)

2.60.60.20. Elastic and Inelastic Scattering

Structure Factor of Elastic α–Particle and Deuteron Scattering for the Heavy–Particle Stripping Mechanism (T)—T. A. Dmitrieva and I. B. Teplov. 15(3), 266–8 (Sep. 1972); CPM-7211A1895

Elastic Scattering of 26.6–MeV α Particles by Light Nuclei (E)—B. I. Kuznetsov, R. E. Ovsyannikova and I. P. Chernov. 15(4), 377–8 (Oct. 1972); CPM-7212D1922

Influence of Nonlocality on Inelastic α–Particle Scattering (T)—V. V. Tokarevskii. 15(5), 503–7 (Nov. 1972); CPM-7302E0029

2.60.60.40. Two– or Three–Nucleon Transfer Reactions

Analysis of Proton Angular Distributions in (α,p) Reactions with the Nuclei Si^{28}, P^{31}, Cl^{35}, Fe^{56}, Cu^{63} and Cu^{65} in the Three–Nucleon Stripping Theory (E)—Yu. S. Stryuk and V. V. Tokarevskii. 15(6), 614–7 (Dec. 1972); CPM-7302E0140

Investigation of the Mirror Reactions (He^3, n) and (He^3, p) on the C^{12} Nucleus (E)—O. D. Brill', A. D. Vongai, K. A. Gridnev and A. R. Faiziev. 16(4), 359–63 (Apr. 1973); CPM-7309D1075

Excitation of 0^+ States in Two–Nucleon Transfer Reactions (E)—S. K. Abdulvagabova, S. P. Ivanova and N. I. Pyatov. 16(6), 665–9 (Jun. 1973); CPM-7310E1513

2.60.60.90. Other Topics

Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{17})C^{12}{}_{4.43}$, $B^{11}(\alpha, t_{17})C^{12}{}_{4.43}$, and $C^{12}(\alpha, \alpha_{17})C^{12}{}_{4.43}$ (E)—A. A. El–Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskii, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskii, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharinov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

The (α, t) Reaction in Li^7 and B^{11} (E)—O. I. Vasil'eva, N. V. Karabanov, V. M. Lebedev, A. V. Spasskii and I. B. Teplov. 16(3), 257–9 (Mar. 1973); CPM-7306D0353

2.60.65. Heavy–Ion–Induced Reactions and Scattering ($A \geq 5$)

Energy Balance in Fission by Heavy Ions (E)—S. A. Karamyan, Tak An Nguyen and K. N. Sharifov. 15(3), 244–8 (Sep. 1972); CPM-7211A1873

Compound Nucleus Production by Accelerated Xenon Ions (E)—G. N. Flerov, S. A. Karamyan, G. S. Popeko, A. G. Popeko and I. A. Shelaev. 15(6), 618–9 (Dec. 1972); CPM-7302E0144

Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. É. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

Lifetimes of Excited Compound Nuclei in the Range $79<Z<89$, Measured by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, F. Normuratov and S. P. Tret'yakova. 16(3), 249–52 (Mar. 1973); CPM-7306D0345

Angular Distribution of Neutrons Produced by Irradiating Ge, Mo, Ag, and Pr Targets with Heavy Ions of C, O, Ne, and Ar (E)—A. S. Il'inov, S. A. Karamyan, Tack An Nguyen and K. N. Sharifov. 16(3), 260–2 (Mar. 1973); CPM-7306D0356

Some Peculiarities of Interaction of Ne^{20} and C^{12} Ions with Nuclei at 10–17 MeV/Nucleon (E)—V. M. Nikolaev and V. A. Shchegolev. 16(3), 263–5 (Mar. 1973); CPM-7306D0359

Angular Distribution and Excitation Functions of the Reactions (N^{15}, N^{16}), (N^{14}, N^{16}), (N^{15}, N^{17}), (N^{14}, N^{17}) (E)—A. G. Artyukh, V. V. Volkov, L. Pomorski and J. Tys. 16(5), 499–501 (May 1973); CPM-7309D1215

2.60.70. Meson– and Hyperon–Induced Reactions and Scattering ($A \geq 5$)

Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15(1), 10–1 (Jul. 1972); CPM-7209C0962

Production of Fast Helium and Triton Nuclei in an Interaction of High–Energy Pions with Heavy Emulsion Nuclei (E)—A. I. Borisenko, A. P. Kazanskaya, P. V. Morozova, Zh. S. Takibaev and N. S. Titova. 15(4), 419–22 (Oct. 1972); CPM-7212D1964

Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskii, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Excitation Spectrum of Residual Nuclei in (π^-, nn) Reaction (E)—T. I. Kopaleishvili, I. Z. Machabeli and M. Sh. Chachkhunashvili. 15 (6), 629–31 (Dec. 1972); CPM-7302E0155

Coherent Production of Ω^- and Ξ Hyperons on Nuclei and the Determination of Their Spin and Parity (T)—B. Z. Kopeliovich. 16 (3), 326–31 (Mar. 1973); CPM-7306D0422

2.60.75. Nuclear Fission

Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15 (1), 12–6 (Jul. 1972); CPM-7209C0964

Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

Mass Distribution of Products of Long–Range–Particle Fission (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(2), 119–20 (Aug. 1972); CPM-7210C1380

Photofission and Photofragmentation of Tantalum (E)—V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 15(3), 228–31 (Sep. 1972); CPM-7211A1857

Energy Balance in Fission by Heavy Ions (E)—S. A. Karamyan, Tak An Nguyen and K. N. Sharifov. 15(3), 244–8 (Sep. 1972); CPM-7211A1873

Delayed Fission of Some Neutron—Deficient Nuclei (T)—N. K. Skobelev. 15(3), 249–50 (Sep. 1972); CPM-7211A1878

Genetic Connection between the Delayed–Neutron Radiation and the Fission Process (T)—B. P. Maksyutenko. 15(3), 251–5 (Sep. 1972); CPM-7211A1880

Asymmetry of Nuclear Fission with Allowance for Quantum Effects (T)—B. T. Geilikman and O. V. Zimina. 15(3), 256–9 (Sep. 1972); CPM-7211A1885

Observation of Shadows in the Angular Distributions of Fragments from Photofission of Tantalum, and Evaluation of the Fission Lifetime (E)—N. A. Skakun and N. P. Dikiĭ. 15(3), 341–2(L) (Sep. 1972); CPM-7211A1970

Erratum: Mass Distribution of Products of Long–range–particle Fission [9, 427 (1962)] (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(4), 473–4 (Oct. 1972); CPM-7212D2018

Relative Yields of Xenon Isotopes in Np^{237} and Np^{238} Fission by Neutrons (E)—K. A. Petrzhak, M. G. Pan'yan, V. F. Teplykh and B. M. Aleksandrov. 15(5), 482–3 (Nov. 1972); CPM-7302E0008

Method for the Calculation of the Nuclear Critical Charge (T)—V. S. Popov. 15(5), 595–600 (Nov. 1972); CPM-7302E0121

Angular Measurements of γ–Radiation Yield in Ternary Fission of Cf^{252} (E)—O. I. Ivanov. 15(6), 620–1 (Dec. 1972); CPM-7302E0146

Structure of the One–Particle Spectrum and Energy Dependence of Γ_f/Γ_n (T)—A. V. Ignatyuk, G. N. Smirenkin and A. S. Tishin. 15 (6), 622–5 (Dec. 1972); CPM-7302E0148

Nucleon Pairing and Dependence of the Number of Prompt Neutrons on the Fragment Mass (T)—A. E. Savel'ev, S. V. Zhikhareva and M. A. Savel'eva. 16(1), 11–3 (Jan. 1973); CPM-7304E0115

Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. É. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

Fission in $Pb^{206}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

Measurement of the Excitation Energy of the Spontaneously Fissioning Isomer $Pu^{239}(\gamma,n)$ (E)—Yu. P. Gangrskiĭ, V. N. Markov, I. F. Kharisov and Yu. M. Tsipenyuk. 16(2), 151–4 (Feb. 1973); CPM-7304E0254

Search for Fission Isomers in the Radium Region (E)—I. M. Kuks, V. I. Matvienko, Yu. A. Nemilov, Yu. A. Selitskiĭ and V. B. Funshtein. 16(2), 244(L) (Feb. 1973); CPM-7304E0347

Lifetimes of Excited Compound Nuclei in the Range $79<Z<89$, Measured by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, F. Normuratov and S. P. Tret'yakova. 16(3), 249–52 (Mar. 1973); CPM-7306D0345

Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and J. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Influence of Excitation Energy on the Mass and Kinetic Energy Distributions of U^{233} Fission Fragments (E)—A. I. Sergachev, N. P. D'yachenko, A. M. Kovalev and B. D. Kuz'minov. 16(3), 266–9 (Mar. 1973); CPM-7306D0362

Fission of U^{235} by Thermal Neutrons (E)—V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich and V. A. Kostylev. 16 (4), 364–71 (Apr. 1973); CPM-7309D1080

Angular Distributions of Fragments in Neutron–Induced Fission of Cf^{249} (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, G. A. Otroshchenko and V. A. Shigin. 16(4), 372–3 (Apr. 1973); CPM-7309D1088

Searches for the Spontaneously Fissioning Isomer Pu^{240m} in the Thermal–Neutron Capture Reaction (E)—G. V. Val'skiĭ, O. M. Mrachkovskiĭ, G. A. Petrov and Yu. S. Pleva. 16(4), 374–5 (Apr. 1973); CPM-7309D1090

Anisotropy in the Angular Distribution of Fragments from Photofission at High Energies (E)—N. A. Demëkhina, V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 16 (5), 502–4 (May 1973); CPM-7309D1218

Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Fission Barriers of Odd Nuclei (T)—G. D. Adeev and P. A. Cherdantsev. 16(5), 507–10 (May 1973); CPM-7309D1223

Study of Phase Transition in the Density of the Excited States of Even–Even Pb Nuclei in the (α, f) Reaction (E)—V. N. Okolovich, M. G. Itkis, K. G. Kuvatov and G. N. Smirenkin. 16 (6), 631–3 (Jun. 1973); CPM-7310E1479

Cf^{252} Fission Neutrons (E)—M. V. Blinov, N. M. Kazarinov and I. T. Krisyuk. 16(6), 634–7 (Jun. 1973); CPM-7310E1482

Energy Dependence of $\bar{\nu}$ in the Fission of U^{235} by Fast Neutrons (E) —M. V. Savin, Yu. A. Khokhlov, A. E. Savel'ev and I. N. Paramonova. 16(6), 638–40 (Jun. 1973); CPM-7310E1486

Average Number of Prompt Neutrons in the Spontaneous Fission of Fm^{256} (E)—M. Dakovskiĭ, Yu. A. Lazarev and Yu. Ts. Oganesyan. 16(6), 641–2 (Jun. 1973); CPM-7310E1489

2.60.90. Other Topics in Nuclear Reactions and Scattering

Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

2.70. PROPERTIES OF SPECIFIC NUCLEI

2.70.20. $6 \leq A \leq 19$

Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15(1), 10–1 (Jul. 1972); CPM-7209C0962

Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{17})C^{12}_{4.43}$, $B^{11}(\alpha,t_{17})C^{12}_{4.43}$, and $C^{12}(\alpha,\alpha_{17})C^{12}_{4.43}$ (E)—A. A. El–Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

Inelastic Scattering of Electrons by Protons and Li^6 Nuclei (E)—Yu. I. Titov and E. V. Stepula. 15(4), 361–4 (Oct. 1972); CPM-7212D1906

Influence of Majorana Forces on the Properties of p–Shell Hypernuclei (T)—A. B. Kochetov and B. A. Khrylin. 16(1), 25–6 (Jan. 1973); CPM-7304E0129

Investigation of the Cluster Structure of the Be^8 Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(4), 382–5 (Apr. 1973); CPM-7309D1098

Form Factors and Transition Densities of the Quadrupole and Octupole Vibrations of the C^{12} Nucleus (T)—I. S. Gul'karov. 16 (4), 386–90 (Apr. 1973); CPM-7309D1102

Generalized Method of Harmonic Polynomials (T)—A. M. Gorbatov. 16(4), 391–4 (Apr. 1973); CPM-7309D1107

The Cluster Model and the Structure of the C^{13} Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(5), 519–21 (May 1973); CPM-7309D1235

2.70.30. $20 \leq A \leq 38$

Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha_1\gamma)Mg^{24}$ for 6.40–MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al–Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15 (6), 605–7 (Dec. 1972); CPM-7302E0131

Radiation of p–Levels of Even–Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)— A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16 (1), 1–5 (Jan. 1973); CPM-7304E0105

Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

2.70.40. $39 \leq A \leq 58$

Mn^{54} Levels (E)—V. M. Mishchenko, A. I. Popov and V. E. Storizhko. 15(4), 343–6 (Oct. 1972); CPM-7212D1888

Measurements of Atomic Masses in the Region from Titanium to Iron (E)—R. A. Demirkhanov, V. V. Dorokhov and M. I. Dzkuya. 15 (5), 475–8 (Nov. 1972); CPM-7302E0001
Nonconservation of P-Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoi, L. M. Smotritskii, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158
Radiation of p-Levels of Even-Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16 (1), 1–5 (Jan. 1973); CPM-7304E0105

2.70.50. $59 \leq A \leq 89$

Sr^{87} and Zr^{93} Fluorescence after the Capture of Thermal Neutrons (E)—L. V. Groshev, L. I. Govor and A. M. Demidov. 15(4), 347–8 (Oct. 1972); CPM-7212D1892
Influence of Nonlocality on Inelastic α–Particle Scattering (T)—V. V. Tokarevskii. 15(5), 503–7 (Nov. 1972); CPM-7302E0029
Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskii, S. N. Abramovich, A. G. Zvenigorodskii and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226
Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

2.70.60. $90 \leq A \leq 149$

Neutron Resonances of Sm Isotopes (E)—E. N. Karzhavina and A. B. Popov. 15(3), 225–7 (Sep. 1972); CPM-7211A1854
Cross Sections of the Reactions $In^{113}(n,n')In^{113m}$ and $Rh^{103}(n,n')Rh^{103m}$ (E)—A. Pazsit and J. Csikai. 15(3), 232–3 (Sep. 1972); CPM-7211A1861
Ratios of the Internal Conversion Coefficients for M4 Transitions in the Nuclei $Te^{121,123,125,127,129}$ (E)—R. A. Kalinauskas, K. V. Makaryunas and R. I. Davidonis. 15(4), 350–1 (Oct. 1972); CPM-7212D1895
Internal Bremsstrahlung Accompanying a Unique β Transition of Cs^{137} (E)—I. S. Batkin and Yu. G. Smirnov. 16(4), 405–6 (Apr. 1973); CPM-7309D1121

2.70.80. $190 \leq A \leq 219$

Use of the Perturbed Angle ϵ_{exper} Correlation to Measure the Hg^{197} 133–keV State g–Factor (E)—N. D. Kornienko, B. G. Kul'Chinskii, A. I. Levon and O. F. Nemets. 15(4), 353–6 (Oct. 1972); CPM-7212D1898
Angular Distributions of 13.7–MeV Neutrons Elastically Scattered by the Isotopes $Pb^{204,207,208}$ (E)—G. E. Belovitskii, L. N. Kolesnikova and I. M. Frank. 15(4), 369–71 (Oct. 1972); CPM-7212D1914
Inelastic Scattering of 13.7 MeV Neutrons by Lead Isotopes (E)—G. E. Belovitskii, L. N. Kolesnikova and I. M. Frank. 15(4), 372–4 (Oct. 1972); CPM-7212D1917
Study of Phase Transition in the Density of the Excited States of Even–Even Pb Nuclei in the (α, f) Reaction (E)—V. N. Okolovich, M. G. Itkis, K. G. Kuvatov and G. N. Smirenkin. 16 (6), 631–3 (Jun. 1973); CPM-7310E1479

2.70.90. $220 \leq A$

Delayed Fission of Some Neutron—Deficient Nuclei (T)—N. K. Skobelev. 15(3), 249–50 (Sep. 1972); CPM-7211A1878
Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894
Nucleon Pairing and Dependence of the Number of Prompt Neutrons on the Fragment Mass (T)—A. E. Savel'ev, S. V. Zhikhareva and M. A. Savel'eva. 16(1), 11–3 (Jan. 1973); CPM-7304E0115
Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskii, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349
Cf^{252} Fission Neutrons (E)—M. V. Blinov, N. M. Kazarinov and I. T. Krisyuk. 16(6), 634–7 (Jun. 1973); CPM-7310E1482
Energy Dependence of $\bar{\nu}$ in the Fission of U^{233} by Fast Neutrons (E)—M. V. Savin, Yu. A. Khokhlov, A. E. Savel'ev and I. N. Paramonova. 16(6), 638–40 (Jun. 1973); CPM-7310E1486
Average Number of Prompt Neutrons in the Spontaneous Fission of Fm^{256} (E)—M. Dakovskii, Yu. A. Lazarev and Yu. Ts. Oganesyan. 16(6), 641–2 (Jun. 1973); CPM-7310E1489

2.70.95. Others

Magnetic Moments of Three–Particle Nuclei (T)—N. B. Krupennikova. 15(3), 260–1 (Sep. 1972); CPM-7211A1889
De–Excitation of Even–Odd Nuclei in the Range $91 \leq N \leq 113$ After Capturing Thermal Neutrons (T)—L. V. Groshev, A. M. Demidov and L. L. Sokolovskii. 16(3), 245–8 (Mar. 1973); CPM-7306D0341
Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

2.80. NUCLEAR ENGINEERING AND NUCLEAR POWER STUDIES

Cross Sections and Spectra of Particles Appearing in Processes with the Participation of Reactor Antineutrinos (T)—L. A. Mikaélyan and S. A. Fayans. 15(5), 543–6 (Nov. 1972); CPM-7302E0069

2.90. EXPERIMENTAL METHODS AND INSTRUMENTATION FOR ELEMENTARY PARTICLE AND NUCLEAR PHYSICS

Possibilities of Resonance Interferometers (T)—G. I. Kopylov. 15(1), 103–7 (Jul. 1972); CPM-7209C1055
The Relativistic Rise in Ionization in Gas Track Detectors (T)—G. I. Merzon. 15(2), 157–60 (Aug. 1972); CPM-7210C1418
Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskii, Yu. V. Mikhailov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

3.10. ATOMS

Multipole Expansion of Lamb Shift (T)—Ya. I. Granovskii. 15(2), 192–4 (Aug. 1972); CPM-7210C1453
Measurements of Atomic Masses in the Region from Titanium to Iron (E)—R. A. Demirkhanov, V. V. Dorokhov and M. I. Dzkuya. 15 (5), 475–8 (Nov. 1972); CPM-7302E0001
Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164
Pion Polarizability, Virtual Compton Effect, and the Decay $\pi \to e\nu\gamma$ (T)—M. V. Terent'ev. 16(1), 87–93 (Jan. 1973); CPM-7304E0191

3.20. MOLECULES

Influence of Single Scattering Processes on the Horizontal Fluxes of Cosmic Muons in Water (T)—A. T. Matachun, Yu. A. Trubkin and V. M. Fedorov. 16(2), 191–3 (Feb. 1973); CPM-7304E0294

3.30. MACROMOLECULES AND POLYMERS

Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

3.40. PHYSICAL CHEMISTRY

Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164
Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

4.20. STRUCTURE AND PROPERTIES OF FLUIDS

The Relativistic Rise in Ionization in Gas Track Detectors (T)—G. I. Merzon. 15(2), 157–60 (Aug. 1972); CPM-7210C1418

Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164

Influence of Single Scattering Processes on the Horizontal Fluxes of Cosmic Muons in Water (T)—A. T. Matachun, Yu. A. Trubkin and V. M. Fedorov. 16(2), 191–3 (Feb. 1973); CPM-7304E0294

5.70. PASSAGE OF PARTICLES AND RADIATION THROUGH SOLIDS

Optical Radiation Excited by Nonrelativistic Charged Particles at Metal Surfaces (E)—A. P. Kobzev, S. Michalak, E. Rutkowski and I. M. Frank. 15(2), 184–8 (Aug. 1972); CPM-7210C1445

Ionization Loss of High-Energy Electrons (E)—A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov and P. N. Shareĭko. 16(2), 189–90 (Feb. 1973); CPM-7304E0292

Calculation of Electron–Proton Showers Produced in Lead by Electrons and γ Rays with Energies from 50 to 400 MeV (T)—M. Ya. Borkovskiĭ and S. P. Kruglov. 16(2), 194–8 (Feb. 1973); CPM-7304E0297

5.80. PHYSICS OF SURFACES, THIN FILMS, INTERFACES AND SMALL PARTICLES

Optical Radiation Excited by Nonrelativistic Charged Particles at Metal Surfaces (E)—A. P. Kobzev, S. Michalak, E. Rutkowski and I. M. Frank. 15(2), 184–8 (Aug. 1972); CPM-7210C1445

9.10. ERRATA

Erratum: "Direct Production of Lepton Pairs by a Neutrino Beam in the Electromagnetic Field of a Nucleus [3, 497 (,4)] (T)—M. S. Marinov, Yu. P. Nikitin, Yu. P. Orevkov and E. P. Shabalin. 15 (1), 118 (Jul. 1972); CPM-7209C1070

Erratum: Neutral Currents and the Limit of Validity of the Theory of Weak Interactions [6, 603 (,4)] (T)—B. L. Ioffe and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu+Z\to\mu^-+W^++Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W^+ Boson in the Reaction $\nu+Z\to\mu^-+Z+W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Erratum: Higher-order Effects in External Field: Pair Production by a Particle [14, 572 (,5)] (T)—V. N. Baier, V. M. Katkov and V. M. Strakhovenko. 15(1), 118 (Jul. 1972); CPM-7209C1070

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A

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Abdulvagabova, S. K.—Excitation of 0^+ States in Two-Nucleon Transfer Reactions (E)—S. K. Abdulvagabova, S. P. Ivanova and N. I. Pyatov. 16(6), 665–9 (Jun. 1973); CPM-7310E1513

Abduzhamilov, Sh.—Coherent Diffraction Production of Pions by Photons in Photoemulsion Nuclei (E)—Sh. Abduzhamilov, S. A. Azimov, N. Sh. Saidkhanov and V. M. Chudakov. 15(2), 169–75 (Aug. 1972); CPM-7210C1430

Abov, Yu. G.—P-Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

Abramov, S. A.—Realization of the Physical Basis for Su(3) and the Probabilities of E1 Transitions in the Su(3) Formalism (T)—G. N. Afanas'ev, S. A. Abramov and P. P. Raichev. 16(1), 27–30 (Jan. 1973); CPM-7304E0131

Abramovich, S. N.—Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

Abramyan, L. O.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Adamyan, F. V.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Adeev, G. D.—Fission Barriers of Odd Nuclei (T)—G. D. Adeev and P. A. Cherdantsev. 16(5), 507–10 (May 1973); CPM-7309D1223

Afanas'ev, G. N.—Realization of the Physical Basis for Su(3) and the Probabilities of E1 Transitions in the Su(3) Formalism (T)—G. N. Afanas'ev, S. A. Abramov and P. P. Raichev. 16(1), 27–30 (Jan. 1973); CPM-7304E0131

Afanas'ev, N. G.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Afomian, A. A.—Consequences of Broken SU(3) $\times$SU(3) Symmetry for Low Energy πK Scattering (T)—A. A. Afomian. 15(1), 71–3 (Jul. 1972); CPM-7209C1023

Afonin, A. A.—K-Matrix Model of Low-Energy πK Scattering (T)—A. A. Afonin. 15(3), 327–30 (Sep. 1972); CPM-7211A1956

Agababyan, N. M.—Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15(1), 10–1 (Jul. 1972); CPM-7209C0962

Agan'yants, A. O.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Agranovich, V. L.—Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Akheizer, I. A.—Theory of (γ,N) Reactions at Energies Above the Pion Production Thereshold (T)—I. A. Akheizer and B. I. Barts. 15(2), 143–6 (Aug. 1972); CPM-7210C1404

—Oscillations of a Fermi Liquid Drop and Giant Resonance in Medium and Heavy Nuclei (T)—I. A. Akhiezer, B. I. Barts and V. T. Lazurik–El'tsufin. 15(5), 484–6 (Nov. 1972); CPM-7302E0010

Akhmerov, R. V.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

Akulov, V. P.—U(4) Symmetry of Leptons and Quarks (T)—V. P. Akulov and D. V. Volkov. 15(4), 461–3 (Oct. 1972); CPM-7212D2006

Aleksandrov, B. M.—Relative Yields of Xenon Isotopes in Np^{237} and Np^{238} Fission by Neutrons (E)—K. A. Petrzhak, M. G. Pan'yan, V. F. Teplykh and B. M. Aleksandrov. 15(5), 482–3 (Nov. 1972); CPM-7302E0008

Aleshin, V. D.—Proton Elastic Scattering by Ca Nuclei in the Energy Region 5.0–6.4 MeV (E)—E. A. Romanovskiĭ, E. I. Sirotinin, T. I. Spasskaya, K. S. Shishkin and V. D. Aleshin. 15(4), 365–6 (Oct. 1972); CPM-7212D1910

Alkhazov, I. D.—Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15(1), 12–6 (Jul. 1972); CPM-7209C0964

Al-Kuraishi, N. Kh.—Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al-Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15(6), 605–7 (Dec. 1972); CPM-7302E0131

Al'vash, M. S.—Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al-Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15(6), 605–7 (Dec. 1972); CPM-7302E0131

Amov, B.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaĭtseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Andreev, E. A.—Differential Cross Sections and Angular Distributions of γ Rays from the $(n,n'\gamma)$ Reaction on Pr^{141} and Ho^{165} (E)—E. A. Andreev, S. P. Sit'ko and V. A. Shevchenko. 15(5), 479–81 (Nov. 1972); CPM-7302E0005

Andreev, G. B.—Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Anisovich, V. V.—Calculations of Shadow Effects in Proton-Deuteron Collisions (T)—V. V. Anisovich, P. E. Volkovitskiĭ and L. G. Dakhno. 15(1), 97–9 (Jul. 1972); CPM-7209C1049

Ansel'm, A. A.—Introduction of Noncommuting Operators into Trajectories of Dual Models (T)—A. A. Ansel'm, G. S. Danilov and I. T. Dyatlov. 15(1), 87–92 (Jul. 1972); CPM-7209C1039

Antipov, Yu. M.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitach, G. Damgaard, F. A. Éch, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Antonov, A. N.—Elastic and Inelastic Glauber Scattering of Protons by C^{12} in the α-Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(1), 38–41 (Jan. 1973); CPM-7304E0142

—Excitation of Nuclear Vibrational Levels by Electrons According to the α-Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(2), 182–4 (Feb. 1973); CPM-7304E0285

Antonova, M. G.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

Antuf'ev, Yu. P.—Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Anzon, Z. V.—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Arifkhanov, U. R.—Be^8 and B^9 Levels from (p,n) Reactions (E)—U. R. Arifkhanov, M. Gulyamov, B. I. Islamov and É. Érgashov. 15(6), 610 (Dec. 1972); CPM-7302E0136

Arkatov, Yu. M.—Photodisintegration of He^4 into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Artyukh, A. G.—Angular Distribution and Excitation Functions of the Reactions (N^{15}, N^{16}), (N^{14}, N^{16}), (N^{15}, N^{17}), (N^{14}, N^{17}) (E)—A. G. Artyukh, V. V. Volkov, L. Pomorski and J. Tys. 16(5), 499–501 (May 1973); CPM-7309D1215

Arushanov, G. G.—Solution of Unitarity Condition with Modified Overlap Function (T)—G. G. Arushanov. 15(1), 74–8 (Jul. 1972); CPM-7209C1026

—The Ratio of the Real Part of the Scattering Amplitude to its Imaginary Part at Non-zero Momentum Transfers (T)—G. G. Arushanov. 15(2), 211–3 (Aug. 1972); CPM-7210C1472

Avakyan, V. V.—Analysis of Theoretical and Experimental Data on the Multiplicity of Shower Particles in High-Energy Hadron Interactions (R)—V. V. Avakyan, M. I. Keropyan and É. A. Mamidzhanyan. 16(4), 423–5 (Apr. 1973); CPM-7309D1139

Averiyanov, I. K.—Mechanism of (n,p) and (n,α) Reactions on Light and Medium Nuclei (E/T)—A. E. Savel'ev, I. K. Averiyanov and B. M. Dzyuba. 15(4), 416–8 (Oct. 1972); CPM-7212D1961

Azaryan, M. O.—Comparison of the Characteristics of the Interaction of Protons and Neutrons with C, Fe, and Pb Nuclei (E)—M. O. Azaryan, É. A. Mamidzhanyan, R. M. Martirosov and R. A. Suleimanov. 16(6), 678–81 (Jun. 1973); CPM-7310E1526

Azimov, S. A.—Coherent Diffraction Production of Pions by Photons in Photoemulsion Nuclei (E)—Sh. Abduzhamilov, S. A. Azimov, N. Sh. Saidkhanov and V. M. Chudakov. 15(2), 169–75 (Aug. 1972); CPM-7210C1430

Aznauryan, I. G.—Dispersion Relations and Data on the Reaction $\gamma n \to p\pi^-$ in the 33 Resonance Region (T)—I. G. Aznauryan and A. N. Zaslavskiĭ. 15(6), 696–8 (Dec. 1972); CPM-7302E0222

B

Babaev, Z. R.—Continuous Sum Rules and Asymptotic Total πN Interaction Cross Sections (E)—Z. R. Babaev and V. S. Zamiralov. 16(6), 718–9 (Jun. 1973); CPM-7310E1566

Baier, V. N.—Pair Production at Large Angles in Colliding-Beam Experiments (T)—V. N. Baier and V. S. Fadin. 15(1), 56–8 (Jul. 1972); CPM-7209C1008

—Erratum: Higher-order Effects in External Field: Pair Production by a Particle [14, 572 (,5)] (T)—V. N. Baier, V. M. Katkov and V. M. Strakhovenko. 15(1), 118 (Jul. 1972); CPM-7209C1070

Balakin, V. E.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Balashov, V. V.—Knock-Out Reactions in Quasielastic and Antiquasielastic Kinematics (T)—V. V. Balashov, N. M. Kabachnik and N. N. Titarenko. 16(5), 622(L) (May 1973); CPM-7309D1338

Bardin, D. Yu.—On the Decay Mode $\mu^+ \to e^+\nu_e\bar{\nu}_\mu e^+e^-$ (T)—D. Yu. Bardin, Ts. G. Istatkov and G. B. Mitsel'makher. 15(2), 161–2 (Aug. 1972); CPM-7210C1422

—The Radiative Decays π (K) $\to l\nu\gamma\gamma$ (T)—D. Yu. Bardin and S. M. Bilen'kiĭ. 16(3), 311–5 (Mar. 1973); CPM-7306D0407

Barmin, V. V.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Bartenev, V. D.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Barts, B. I.—Theory of (γ,N) Reactions at Energies Above the Pion Production Thereshold (T)—I. A. Akheizer and B. I. Barts. 15(2), 143–6 (Aug. 1972); CPM-7210C1404

—Oscillations of a Fermi Liquid Drop and Giant Resonance in Medium and Heavy Nuclei (T)—I. A. Akhiezer, B. I. Barts and V. T. Lazurik-Él'tsufin. 15(5), 484–6 (Nov. 1972); CPM-7302E0010

Barylov, V. G.—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Basova, B. G.—Fission of U^{235} by Thermal Neutrons (E)—V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich and V. A. Kostylev. 16(4), 364–71 (Apr. 1973); CPM-7309D1080

Batkin, I. S.—Internal Bremsstrahlung Accompanying a Unique β Transition of Ca^{137} (E)—I. S. Batkin and Yu. G. Smirnov. 16(4), 405–6 (Apr. 1973); CPM-7309D1121

Batusov, Yu. A.—Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15 (1), 10–1 (Jul. 1972); CPM-7209C0962

Bat'yan, A. L.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Baz', A. I.—A Model for the Equations of Nuclear Physics (T)—A. I. Baz' and M. V. Zhukov. 16(1), 31–7 (Jan. 1973); CPM-7304E0135

—Use of the K-Harmonics Method for Spin–Orbit Splitting Calculations of Light Nuclei (T)—A. I. Baz', A. M. Gorbatov, V. F. Demin, Yu. E. Pokrovskiĭ and Yu. K. Rogov. 16(2), 179–81 (Feb. 1973); CPM-7304E0282

—Model of the Equations of Nuclear Physics. One Decay Channel (T)—A. I. Baz' and M. V. Zhukov. 16(5), 529–36 (May 1973); CPM-7309D1245

Bellacher, V. I.—O(3, 1) Model with Mesons Having an Intrinsic Structure (T)—V. I. Belincher. 15(4), 464–70 (Oct. 1972); CPM-7212D2009

Belousov, A. S.—Ionization Loss of High-Energy Electrons (E)—A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov and P. N. Shareiko. 16(2), 189–90 (Feb. 1973); CPM-7304E0292

Belovitskiĭ, G. E.—Angular Distributions of 13.7-MeV Neutrons Elastically Scattered by the Isotopes $Pb^{206,207,208}$ (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 369–71 (Oct. 1972); CPM-7212D1914

—Inelastic Scattering of 13.7 MeV Neutrons by Lead Isotopes (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 372–4 (Oct. 1972); CPM-7212D1917

Belyaev, S. T.—Method of Generalized Density Matrix in the Theory of Collective Excitations (T)—S. T. Belyaev and V. G. Zelevinskiĭ. 16(6), 657–64 (Jun. 1973); CPM-7310E1505

Beresnev, V. I.—Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Berezhnev, S. F.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Berkov, A. V.—Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W^+ Boson in the Reaction $\nu + Z \to \mu^- + Z + W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Beznogikh, G. G.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Bezrukov, I. B.—Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. L. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Bien, Chyung—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Bilen'kiĭ, S. M.—The Radiative Decays π (K) $\to l\nu\gamma$ (T)—D. Yu. Bardin and S. M. Bilen'kiĭ. 16(3), 311–5 (Mar. 1973); CPM-7306D0407

Birulev, V. K.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Blinov, M. V.—Cf^{252} Fission Neutrons (E)—M. V. Blinov, N. M. Kazarinov and I. T. Krisyuk. 16(6), 634–7 (Jun. 1973); CPM-7310E1482

Bluvshteĭn, R. É.—Transition Toroidal Form Factors of Light Nuclei (T)—R. É. Bluvshteĭn, V. M. Dubovik and A. A. Cheshkov. 15(1), 59–63 (Jul. 1972); CPM-7209C1011

Bochev, B.—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Bochin, V. P.—Experiments Aimed at Finding Proton Decay from the Ground State (E)—D. D. Bogdanov, V. P. Bochin, V. A. Karnaukhov and L. A. Petrov. 16(5), 491–6 (May 1973); CPM-7309D1207

Bogdanov, D. D.—Experiments Aimed at Finding Proton Decay from the Ground State (E)—D. D. Bogdanov, V. P. Bochin, V. A. Karnaukhov and L. A. Petrov. 16(5), 491–6 (May 1973); CPM-7309D1207

Bogdanov, V. G.—Mass Distribution of Products of Long-Range-Particle Fission (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(2), 119–20 (Aug. 1972); CPM-7210C1380

—Erratum: Mass Distribution of Products of Long-range-particle Fission [9, 427 (1962)] (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(4), 473–4 (Oct. 1972); CPM-7212D2018

Bogomol'nyĭ, E. B.—Possible CPT-Breaking Effects and the Decay $K_L \to 2\mu$ (T)—E. B. Bogomol'nyĭ, A. D. Dolgov, V. I. Zakharov, L. B. Okun' and M. V. Terent'ev. 15(5), 549–53 (Nov. 1972); CPM-7302E0075

Bogomol'nyĭ, E. B.—The $K^0_L \to \mu^+ + \mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyĭ, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

Bogoslovskiĭ, G. Yu.—Geometrical Approach to the Investigation of Kinematic Symmetries of Free Particle Systems (T)—N. P. Klepikov and G. Yu. Bogoslovskiĭ. 16(4), 478–82 (Apr. 1973); CPM-7309D1194

Boĭkov, V. V.—Investigation of (p,pd) -Reaction on Light Nuclei at 50 MeV (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 15(3), 239–40 (Sep. 1972); CPM-7211A1868

—The O^{16}(p, pα)C^{13} Reaction with 50-MeV Protons (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 16(5), 497–8 (May 1973); CPM-7309D1213

Boĭtsov, V. N.—Two-Photon Exchange in Large-Angle Scattering of High-Energy Electrons by Light Nuclei (T)—V. N. Boĭtsov, L. A. Kondratyuk and V. B. Kopeliovich. 16(3), 287–91 (Mar. 1973); CPM-7306D0383

Boos, É. G.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

—Charged Particle Distribution in Inelastic Proton–Neutron Interactions at 19.2 GeV/c (E)—É. G. Boos, B. O. Zhautykov, E. S. Lukin, A. M. Mosienko and R. A. Tursunov. 16(2), 187–8 (Feb. 1973); CPM-7304E0290

—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaĭtsev and K. V. Shafapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Boreskov, K. G.—Model of Reggeized One-Pion Exchange and the $pp \to pn\pi^+$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskiĭ and L. A. Ponomarev. 15(2), 203–8 (Aug. 1972); CPM-7210C1464

—Analysis of the $np \to pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaidalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Borisenko, A. L.—Production of Fast Helium and Triton Nuclei in an Interaction of High-Energy Pions with Heavy Emulsion Nuclei (E)—A. I. Borisenko, A. P. Kazanskaya, P. V. Morozova, Zh. S. Takibaev and N. S. Titova. 15(4), 419–22 (Oct. 1972); CPM-7212D1964

Borkovskiĭ, M. Ya.—Calculation of Electron–Proton Showers Produced in Lead by Electrons and γ Rays with Energies from 50 to 400 MeV (T)—M. Ya. Borkovskiĭ and S. P. Kruglov. 16(2), 194–8 (Feb. 1973); CPM-7304E0297

Borovlev, V. I.—Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Bozovoĭ, N. A.—Nonconservation of P–Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoĭ, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Brill', O. D.—Investigation of the Mirror Reactions (He^3, n) and (He^3, p) on the C^{12} Nucleus (E)—O. D. Brill', A. D. Vongaĭ, K. A. Gridnev and A. R. Faĭziev. 16(4), 359–63 (Apr. 1973); CPM-7309D1075

Budagov, Y. A.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

Budagov, Yu. A.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Budnev, V. M.—Applicability of the Weizsäcker–Williams Approximation to Two–Photon Particle Production (T)—V. M. Budnev, I. F. Ginzburg, G. V. Medelin and V. G. Serbo. 16(2), 201–3 (Feb. 1973); CPM-7304E0304

Budnik, A. P.—High–Spin Levels of Even–Even Nuclei in a Phenomenological Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 15(3), 262–3 (Sep. 1972); CPM-7211A1891

—E2 Transitions and Quadrupole Moments of States with High Spin in the Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 16(1), 17–8 (Jan. 1973); CPM-7304E0121

Bugriĭ, A. I.—$NN \to 3\pi$ Annihilation in Dual Models (T)—A. I. Bugriĭ, L. L. Enkovskiĭ and N. A. Kobylinskiĭ. 15(6), 699–701 (Dec. 1972); CPM-7302E0225

Bujak, A.—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Buki, A. Ya.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Ya. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Bukin, A. D.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Bunakov, V. E.—Examination of Distorted Wave Method for Stripping Reactions to Resonant States (T)—V. E. Bunakov, K. A. Gridnev and L. V. Krasnov. 15(5), 508–12 (Nov. 1972); CPM-7302E0034

Bunatyan, G. G.—Probability of (μ^-, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

Bunyatov, S. A.—Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15(1), 10–1 (Jul. 1972); CPM-7209C0962

—Model of the Partial–Wave Analysis of the Δ_{1236} Resonance Production Reactions $\pi N \to \pi\pi N$ Near Threshold with Allowance for the Triangle Graph Contribution (T)—S. A. Bunyatov, V. S. Kurbatov and A. K. Likhoded. 16(6), 705–8 (Jun. 1973); CPM-7310E1553

—Estimate of the $\pi\pi$ Scattering Length a_0 by the Method of Separating the Triangle Graph Contribution in the Reactions $\pi N \to \pi\pi N$ (T/E)—S. A. Bunyatov, V. S. Kurbatov, A. K. Likhoded and H. M. Staudenmaier. 16(6), 709–12 (Jun. 1973); CPM-7310E1557

Bushnin, Yu. B.—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaĭtsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Busnello, R.—Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Buyak, A.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

Bychenkov, V. S.—Mass Distribution of Products of Long–Range–Particle Fission (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(2), 119–20 (Aug. 1972); CPM-7210C1380

—Erratum: Mass Distribution of Products of Long–range–particle Fission [9, 427 (1962)] (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(4), 473–4 (Oct. 1972); CPM-7212D2018

Byvalin, S. A.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

C

Chachkhunashvili, M. Sh.—Excitation Spectrum of Residual Nuclei in (π^-, nn) Reaction (E)—T. I. Kopaleishvili, I. Z. Machabeli and M. Sh. Chachkhunashvili. 15(6), 629–31 (Dec. 1972); CPM-7302E0155

Chasnikov, I. Ya.—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Chechin, V. A.—Ultra–High–Energy Cosmic Rays and a Possible Generalization of Relativistic Theory (T)—D. A. Kirzhnits and V. A. Chechin. 15(5), 585–9 (Nov. 1972); CPM-7302E0111

Cherdantsev, P. A.—Fission Barriers of Odd Nuclei (T)—G. D. Adeev and P. A. Cherdantsev. 16(5), 507–10 (May 1973); CPM-7309D1223

Chernei, M. I.—Rotational Invariance, Moments of Inertia, and 1^+ States in Deformed Nuclei (T)—N. I. Pyatov and M. I. Chernei. 16(5), 514–8 (May 1973); CPM-7309D1230

Chernev, Kh. M.—Slope Parameter of Differential Elastic pp Scattering Cross Section (T)—Kh. M. Chernev. 16(4), 421–2 (Apr. 1973); CPM-7309D1137

Chernov, I. P.—Backward Scattering of Deutrons by Light Nuclei (E)—V. A. Matusevich, V. A. Solov'ev and I. P. Chernov. 15(4), 375–6 (Oct. 1972); CPM-7212D1920

—Elastic Scattering of 26.6–MeV α Particles by Light Nuclei (E)—B. I. Kuznetsov, R. E. Ovsyannikova and I. P. Chernov. 15(4), 377–8 (Oct. 1972); CPM-7212D1922

Chernyak, V. L.—Virtual $\gamma\gamma$ Scattering and a New Type of Scaling (T)—V. L. Chernyak. 16(4), 433–9 (Apr. 1973); CPM-7309D1149

Cheshkov, A. A.—Transition Toroidal Form Factors of Light Nuclei (T)—R. E. Bluvshtein, V. M. Dubovik and A. A. Cheshkov. 15(1), 59–63 (Jul. 1972); CPM-7209C1011

Chirkin, Yu. M.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi\,\text{kin}} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Chistyakov, L. V.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

—Cf[250] Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

Chistyakova, T. A.—Study of the Reaction $\pi^- + p \rightarrow n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L \rightarrow 3\pi^0)/\Gamma(K_L \rightarrow \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Chkalov, I. L.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Chmil, V. I.—Photodisintegration of He^4 into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Chudakov, V. M.—Coherent Diffraction Production of Pions by Photons in Photoemulsion Nuclei (E)—Sh. Abduzhamilov, S. A. Azimov, N. Sh. Saidkhanov and V. M. Chudakov. 15(2), 169–75 (Aug. 1972); CPM-7210C1430

Chumin, V. G.—Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894

Chuprunov, D. L.—Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha\gamma)Mg^{24}$ for 6.40–MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chuprunov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Chursin, G. P.—Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Chuvilo, I. V.—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

Chyong B'en—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

Csikai, J.—Cross Sections of the Reactions $In^{115}(n,n')In^{115m}$ and $Rh^{103}(n,n')Rh^{103m}$ (E)—A. Pazsit and J. Csikai. 15(3), 232–3 (Sep. 1972); CPM-7211A1861

D

Dalbog, E. I.—Scaling and Hydrodynamic Theory of Multiple Processes (E/T)—E. I. Dalbog, Yu. P. Nikitin and I. L. Rozental'. 16(6), 724–6 (Jun. 1973); CPM-7310E1572

Dakhno, L. G.—Calculations of Shadow Effects in Proton–Deuteron Collisions (T)—V. V. Anisovich, P. E. Volkovitskiĭ and L. G. Dakhno. 15(1), 97–9 (Jul. 1972); CPM-7209C1049

Dakovskiĭ, M.—Average Number of Prompt Neutrons in the Spontaneous Fission of Fm^{256} (E)—M. Dakovskiĭ, Yu. A. Lazarev and Yu. Ts. Oganesyan. 16(6), 641–2 (Jun. 1973); CPM-7310E1489

Dal'karov, O. D.—Spin Effects in Production of Quasinuclear Mesons by Antiprotons (T)—O. D. Dal'karov, V. B. Mandel'tsveig and V. A. Khangulyan. 15(1), 100–2 (Jul. 1972); CPM-7209C1052

Damgaard, G.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \rightarrow p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Danielyan, V. D.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yanta, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Danilov, G. S.—Introduction of Noncommuting Operators into Trajectories of Dual Models (T)—A. A. Ansel'm, G. S. Danilov and I. T. Dyatlov. 15(1), 87–92 (Jul. 1972); CPM-7209C1039

Danilov, M. M.—P–Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

Davidenko, G. D.—Measurement of the Branching Ratio $\Gamma(K_L \rightarrow 3\pi^0)/\Gamma(K_L \rightarrow \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Davidenko, G. V.—Study of the Reaction $\pi^- + p \rightarrow n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

Davidonis, R. I.—Ratios of the Internal Conversion Coefficients for M4 Transitions in the Nuclei $Te^{121,123,125,127,129}$ (E)—R. A. Kalinauskas, K. V. Makaryunas and R. I. Davidonis. 15(4), 350–1 (Oct. 1972); CPM-7212D1895

Davydov, A. V.—Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Debedevich, G. I.—Production of Slow Pions in Interactions between High Energy Particles and Nuclei (E)—N. I. Kostanashvili, G. I. Debedevich, D. S. Nabichvrishvili and G. I. Kharashvili. 16(5), 542–5 (May 1973); CPM-7309D1258

Demchenko, G. P.—Application of the Methods of Statistical Mechanics to Dual Resonance Models (T)—G. P. Demchenko, V. V. Kukhtin and B. V. Struminskiĭ. 16(5), 511–3 (May 1973); CPM-7309D1227

Demekhina, N. A.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

—Anisotropy in the Angular Distribution of Fragments from Photofission at High Energies (E)—N. A. Demekhina, V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 16(5), 502–4 (May 1973); CPM-7309D1218

Demidov, A. M.—Sr^{87} and Zr^{93} Fluorescence after the Capture of Thermal Neutrons (E)—L. V. Groshev, L. I. Govor and A. M. Demidov. 15(4), 347–8 (Oct. 1972); CPM-7212D1892

—Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al-Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15(6), 605–7 (Dec. 1972); CPM-7302E0131

—Radiation of p–Levels of Even–Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16(1), 1–5 (Jan. 1973); CPM-7304E0105

—De–Excitation of Even–Odd Nuclei in the Range $91 \leq N \leq 113$ After Capturing Thermal Neutrons (T)—L. V. Groshev, A. M. Demidov and L. L. Sokolovskiĭ. 16(3), 245–8 (Mar. 1973); CPM-7306D0341

Demidov, V. S.—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Demin, V. F.—Use of the K–Harmonics Method for Spin–Orbit Splitting Calculations of Light Nuclei (T)—A. I. Baz', A. M. Gorbatov, V. F. Demin, Yu. E. Pokrovskiĭ and Yu. K. Rogov. 16 (2), 179–81 (Feb. 1973); CPM-7304E0282

Demirkhanov, R. A.—Measurements of Atomic Masses in the Region from Titanium to Iron (E)—R. A. Demirkhanov, V. V. Dorokhov and M. I. Dzkuya. 15(5), 475–8 (Nov. 1972); CPM-7302E0001

Dem'yanov, A. V.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Dem'yanova, A. S.—Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha_1\gamma)Mg^{24}$ for 6.40–MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Denisov, S. P.—Total Cross Sections of the $\pi^+ p$ and $\pi^+ d$ Interactions in the Momentum Region 15–60 GeV/c and the Glauber Correction (E)—Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin and D. A. Stoyanova. 15(5), 530–3 (Nov. 1972); CPM-7302E0056

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Devenski, P. A.—The Real Part of the Amplitude for Elastic pd–Scattering at an Energy of 70 GeV (E)—V. Ĭ. Zayachki, L. G. Khristov, Z. M. Zlatanov and P. A. Devenski. 15(5), 528–9 (Nov. 1972); CPM-7302E0054

Dikiĭ, N. P.—Observation of Shadows in the Angular Distributions of Fragments from Photofission of Tantalum, and Evaluation of the Fission Lifetime (E)—N. A. Skakun and N. P. Dikiĭ. 15(3), 341–2 (L) (Sep. 1972); CPM-7211A1970

Dmitrieva, T. A.—Structure Factor of Elastic α–Particle and Deuteron Scattering for the Heavy–Particle Stripping Mechanism (T)—T. A. Dmitrieva and I. B. Teplov. 15(3), 266–8 (Sep. 1972); CPM-7211A1895

Dolgolenko, A. G.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

—$K_L \to 2\mu$ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312

Dolgov, A. D.—Shrinkage Singularities and Asymptotic Behavior of the Weak Interaction Cross Section (T)—A. D. Dolgov, V. I. Zakharov and L. B. Okun'. 15(4), 451–6 (Oct. 1972); CPM-7212D1996

—Possible CPT–Breaking Effects and the Decay $K_L \to 2\mu$ (T)—E. B. Bogomol'ny, A. D. Dolgov, V. I. Zakharov, L. B. Okun' and M. V. Terent'ev. 15(5), 549–53 (Nov. 1972); CPM-7302E0075

—The $K^0_L \to \mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyi, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

—Contribution of the $\pi^+\pi^-\gamma$ Intermediate State to the Absorptive Part of the $K^0_L \to \mu\bar{\mu}$ Decay Amplitude (T)—A. D. Dolgov, M. A. Shifman and M. Zh. Shmatikov. 16(1), 80–1 (Jan. 1973); CPM-7304E0184

—$K_L \to 2\mu$ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312

Dolinskiĭ, E. L.—Peripheral Model for a Stripping Reaction to a Resonant State (T)—P. O. Dzhamalov, E. I. Dolinskiĭ and A. M. Mukhamedzhanov. 15(2), 147–53 (Aug. 1972); CPM-7210C1408

Donskov, S. V.—Total Cross Sections of the $\pi^+ p$ and $\pi^+ d$ Interactions in the Momentum Region 15–60 GeV/c and the Glauber Correction (E)—Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin and L. A. Stoyanova. 15(5), 530–3 (Nov. 1972); CPM-7302E0056

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Dorokhov, V. V.—Measurements of Atomic Masses in the Region from Titanium to Iron (E)—R. A. Demirkhanov, V. V. Dorokhov and M. I. Dzkuya. 15(5), 475–8 (Nov. 1972); CPM-7302E0001

Dremin, I. M.—Phenomenological Description of Interaction Amplitudes of Off–Mass–Shell Particles (T)—I. M. Dremin. 15(3), 322–6 (Sep. 1972); CPM-7211A1951

Dubna—Analysis of the Experimental Data on the Multiplicities of the Secondary Particles in $\pi^- p$, $\pi^- n$, and $\pi^- C$ Collision at a Momentum 40 GeV/c (E)—Dubna. 16(5), 546–9 (May 1973); CPM-7309D1262

Dubovik, V. M.—Transition Toroidal Form Factors of Light Nuclei (T)—R. É. Bluvshtein, V. M. Dubovik and A. A. Cheshkov. 15(1), 59–63 (Jul. 1972); CPM-7209C1011

Dubovikov, M. S.—Absorptive Model and the Reactions $\pi^- p \to p^- p$ and $\pi^- p \to p^0 n$ at a Momentum 3.25 GeV/c (T)—V. M. Guzhavin and M. S. Dubovikov. 16(2), 229–31 (Feb. 1973); CPM-7304E0332

—Pole (in t) Parametrization of the Signature Factor and the Optical Model (T)—M. S. Dubovikov. 16(3), 316–9 (Mar. 1973); CPM-7306D0412

—Absorption Model and Spin Parity of the B Meson (T)—V. M. Guzhavin and M. S. Dubovikov. 16(3), 320–2 (Mar. 1973); CPM-7306D0416

Dubovikov, N. S.—One More Version of the Absorptive One Pion Exchange Model (T)—V. N. Guzhavin and N. S. Dubovikov. 15 (2), 198–202 (Aug. 1972); CPM-7210C1459

Dubrovina, S. M.—Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

—Angular Distributions of Fragments in Neutron–Induced Fission of Cf^{249} (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, G. A. Otroshchenko and V. A. Shigin. 16(4), 372–3 (Apr. 1973); CPM-7309D1088

—Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Dumbrais, O. V.—Relation between the KNΛ and KNΣ Coupling Constants and Bounds on Them (T)—O. V. Dumbrais. 16(3), 335–6 (Mar. 1973); CPM-7306D0431

Dunaitsev, A. F.—Measurement of the Mean Life of the π^+ Meson by an Oscillographic Method (E)—A. F. Dunaitsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

D'yachenko, N. P.—Influence of Excitation Energy on the Mass and Kinetic Energy Distributions of U^{233} Fission Fragments (E)—A. I. Sergachev, N. P. D'yachenko, A. M. Kovalev and B. D. Kuz'minov. 16(3), 266–9 (Mar. 1973); CPM-7306D0362

Dyatlov, I. T.—Introduction of Noncommuting Operators into Trajectories of Dual Models (T)—A. A. Ansel'm, G. S. Danilov and I. T. Dyatlov. 15(1), 87–92 (Jul. 1972); CPM-7209C1039

Dzhafar, Dzh. D.—Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al–Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15(6), 605–7 (Dec. 1972); CPM-7302E0131

Dzhalaganiya, T. R.—Investigation of the Cluster Structure of the Be ^{8} Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(4), 382–5 (Apr. 1973); CPM-7309D1098

—The Cluster Model and the Structure of the C^{12} Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(5), 519–21 (May 1973); CPM-7309D1235

Dzhamalov, P. O.—Peripheral Model for a Stripping Reaction to a Resonant State (T)—P. O. Dzhamalov, E. I. Dolinskiĭ and A. M. Mukhamedzhanov. 15(2), 147–53 (Aug. 1972); CPM-7210C1408

Dzhelepov, B. S.—Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894

Dzhelepov, V. P.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^-$ + (1, 2, 3, 4, 5) π^0 AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Dzhursaev, A. A.—Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhursaev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164

—Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

Dzkuya, M. I.—Measurements of Atomic Masses in the Region from Titanium to Iron (E)—R. A. Demirkhanov, V. V. Dorokhov and M. I. Dzkuya. 15(5), 475–8 (Nov. 1972); CPM-7302E0001

Dzyuba, B. M.—Mechanism of (n,p) and (n,α) Reactions on Light and Medium Nuclei (E/T)—A. E. Savel'ev, I. K. Averiyanov and B. M. Dzyuba. 15(4), 416–8 (Oct. 1972); CPM-7212D1961

Dzyublik, A. Ya.—Derivation of Bohr–Mottelson Collective Model Equations on the Basis of the Many–Body Problem Hamiltonian (T)—A. Ya. Dzyublik, V. I. Ovcharenko, A. I. Steshenko and G. F. Filippov. 15(5), 487–92 (Nov. 1972); CPM-7302E0013

E

Éch, F. A.—Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Éch, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Éfros, V. D.—K–harmonics Method in the Few–nucleon Problem (T)—V. D. Éfros. 15(2), 128–36 (Aug. 1972); CPM-7210C1389

—Correlated Basis in the Problem of Several Nucleons (T)—Yu. I. Fenin and V. D. Éfros. 15(5), 497–502 (Nov. 1972); CPM-7302E0023

Eldyshev, Yu. N.—Analysis of Elastic Electron Scattering on Light Nuclei on the Basis of Symmetrized Fermi–Density Distribution (E/T)—Yu. N. Eldyshev, V. N. Lukyanov and Yu. S. Pol. 16(3), 282–6 (Mar. 1973); CPM-7306D0378

Éliashvili, M. A.—K_{13} Decays and Chiral Symmetry Breaking (T)—B. A. Magradze, M. N. Tsugulea and M. A. Éliashvili. 15(3), 294–5 (Sep. 1972); CPM-7211A1923

El–Kamhavi, A. A.—Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{17})C^{12}{}_{4.43}$, $B^{11}(\alpha, t_{17})C^{12}{}_{4.43}$, and $C^{13}(\alpha, \alpha_{17})C^{12}{}_{4.43}$ (E)—A. A. El–Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

Enkovskiĭ, L. L.—NN→3π Annihilation in Dual Models (T)—A. I. Bugriĭ, L. L. Enkovskiĭ and N. A. Kobylinskiĭ. 15(6), 699–701 (Dec. 1972); CPM-7302E0225

Epifanov, Yu. N.—Ladder Approximation for the Vertex Function of the Nonrenormalizable $\omega\pi\pi$ Interaction (T)—Yu. N. Epifanov and A. T. Filippov. 15(6), 710–3 (Dec. 1972); CPM-7302E0236

Éramzhyan, R. A.—Neutron Channel in μ^- Capture and Short–Range Nucleon–Nucleon Correlations. The Reaction $\mu^- + He^4H^3 \to n + \nu$ (E)—Yu. A. Salganik and R. A. Éramzhyan. 15(3), 287–9 (Sep. 1972); CPM-7211A1916

Ergakov, V. A.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Érgashov, É.—Be^8 and B^8 Levels from (p,n) Reactions (E)—U. R. Arifkhanov, M. Gulyamov, B. I. Islamov and É. Érgashov. 15(6), 610 (Dec. 1972); CPM-7302E0136

Ermakov, O. N.—P–Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

Ermilova, D. I.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

Evseev, V. S.—Angular Distribution of Low Energy Neutrons from Nuclear μ^- Capture in Sulfur and Calcium (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski, A. A. Nikolina and V. S. Roganov. 15(5), 523–5 (Nov. 1972); CPM-7302E0049

—Probability of (μ^-, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

—Neutron Energy Spectrum from Absorption of Negative Muons by O, S, Ca, and Pb Nuclei (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski and V. S. Roganov. 15(6), 639–44 (Dec. 1972); CPM-7302E0165

—Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhursaev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164

—Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhursaev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

Ezhov, S. N.—Concerning the Description of Direct (n,2n) Processes in Some Nuclei (T)—S. N. Ezhov and V. S. Ol'khovskiĭ. 16(2), 185–6 (Feb. 1973); CPM-7304E0288

F

Fadeev, N. G.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Fadin, V. S.—Pair Production at Large Angles in Colliding–Beam Experiments (T)—V. N. Baier and V. S. Fadin. 15(1), 56–8 (Jul. 1972); CPM-7209C1008

Fairlev, A. R.—Investigation of the Mirror Reactions (He^3, n) and (He^3, p) on the C^{13} Nucleus (E)—O. D. Brill', A. D. Vongaĭ, K. A. Gridnev and A. R. Fairlev. 16(4), 359–63 (Apr. 1973); CPM-7309D1075

Fayans, S. A.—Cross Sections and Spectra of Particles Appearing in Processes with the Participation of Reactor Antineutrinos (T)—L. A. Mikaélyan and S. A. Fayans. 15(5), 543–6 (Nov. 1972); CPM-7302E0069

Fedorov, A. D.—The Assymetric Rigid Rotator Model with Modified Moments of Inertia (T)—A. D. Fedorov. 15(1), 22–3 (Jul. 1972); CPM-7209C0974

—Davydov–Chaban Model Analog (T)—A. D. Fedorov. 15(4), 392–5 (Oct. 1972); CPM-7212D1937

—Rigid Asymmetrical Rotator and Deformability of Nuclei (T)—A. D. Fedorov and V. A. Knyr. 16(4), 376–9 (Apr. 1973); CPM-7309D1092

Fedorov, O. Ya.—Polarization of 1000-MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznyakov, O. Ya. Fedorov and A. V. Shvedchikov. 16(6), 628–30 (Jun. 1973); CPM-7310E1476

Fedorov, V. M.—Influence of Single Scattering Processes on the Horizontal Fluxes of Cosmic Muons in Water (T)—A. T. Matachun, Yu. A. Trubkin and V. M. Fedorov. 16(2), 191–3 (Feb. 1973); CPM-7304E0294

Fenin, Yu. I.—Correlated Basis in the Problem of Several Nucleons (T)—Yu. I. Fenin and V. D. Éfros. 15(5), 497–502 (Nov. 1972); CPM-7302E0023

Filimonov, V. A.—Ratio of Nonmesonic and π^--Decay Probabilities and the Depth of Potential Wells for Λ in Hypernuclei (T)—V. A. Filimonov. 15(2), 189–91 (Aug. 1972); CPM-7210C1450

Filippov, A. T.—Ladder Approximation for the Vertex Function of the Nonrenormalizable $\omega p\pi$ Interaction (T)—Yu. N. Epifanov and A. T. Filippov. 15(6), 710–3 (Dec. 1972); CPM-7302E0236

—Approximate Methods for Solving the Schrödinger Equation with a Singular Potential (T)—V. Sh. Gogokhiya and A. T. Filippov. 15 (6), 714–9 (Dec. 1972); CPM-7302E0240

Filippov, G. F.—Derivation of Bohr–Mottelson Collective Model Equations on the Basis of the Many-Body Problem Hamiltonian (T)—A. Ya. Dzyublik, V. I. Ovcharenko, A. I. Steshenko and G. F. Filippov. 15(5), 487–92 (Nov. 1972); CPM-7302E0013

Flerov, G. N.—Compound Nucleus Production by Accelerated Xenon Ions (E)—G. N. Flerov, S. A. Karamyan, G. S. Popeko, A. G. Popeko and I. A. Shelaev. 15(6), 618–9 (Dec. 1972); CPM-7302E0144

Flyagin, V. B.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Folomeshkin, V. N.—On the Problem of Heavy Leptons (T)—S. S. Gershtein, L. G. Landsberg and V. N. Folomeshkin. 15(2), 195–7 (Aug. 1972); CPM-7210C1456

—Empirical Formula for Pion and Kaon Spectra in pp Interactions (T)—V. N. Folomeshkin. 15(2), 214–8 (Aug. 1972); CPM-7210C1475

—Multifermion Interactions (T)—S. S. Gershtein and V. N. Folomeshkin. 15(3), 296–9 (Sep. 1972); CPM-7211A1925

Fomin, Yu. A.—Increase in the Transverse Momenta in Nuclear Interactions at Energies $\geq 10^{13}$ eV from EAS Data (E)—Yu. A. Fomin and G. B. Khristiansen. 15(4), 423–6 (Oct. 1972); CPM-7212D1968

Foursat, A. D.—Two-Particle Electrodisintegration of He^3 (T)—I. V. Kozlovskiĭ, V. K. Tartakovskiĭ and A. D. Foursat. 16(3), 277–81 (Mar. 1973); CPM-7306D0373

Fradkin, E. S.—Quantization of Massive Gravitation (T)—I. V. Tyutin and E. S. Fradkin. 15(3), 331–4 (Sep. 1972); CPM-7211A1960

—The Theory of a Neutral Gauge Field with Spontaneous Symmetry Breaking (T)—I. V. Tyutin and E. S. Fradkin. 16(4), 464–72 (Apr. 1973); CPM-7309D1180

Frank, I. M.—Optical Radiation Excited by Nonrelativistic Charged Particles at Metal Surfaces (E)—A. P. Kobzev, S. Michalak, B. Rutkowski and I. M. Frank. 15(2), 184–8 (Aug. 1972); CPM-7210C1445

—Angular Distributions of 13.7-MeV Neutrons Elastically Scattered by the Isotopes $Pb^{204,207,208}$ (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 369–71 (Oct. 1972); CPM-7212D1914

—Inelastic Scattering of 13.7 MeV Neutrons by Lead Isotopes (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 372–4 (Oct. 1972); CPM-7212D1917

Franke, V. A.—Analysis of a Dual Fermion Model (T)—S. N. Manida and V. A. Franke. 16(4), 429–32 (Apr. 1973); CPM-7309D1145

Frankfurt, L. L.—Derivation of the Adler and Cabibbo–Radicati Sum Rules and Calculation of the Asymptotics of the Difference between the Cross Sections for the Scattering of Neutrinos and Anti-Neutrinos on Polarized Hadrons (T)—L. L. Frankfurt. 16(6), 690–4 (Jun. 1973); CPM-7310E1538

—Electromagnetic Corrections to the Weak Hadron Form Factor (T)—L. L. Frankfurt. 16(6), 695–9 (Jun. 1973); CPM-7310E1543

Funshtein, V. B.—Search for Fission Isomers in the Radium Region (E)—I. M. Kuks, V. I. Matvienko, Yu. A. Nemilov, Yu. A. Selitskiĭ and V. B. Funshtein. 16(2), 244(L) (Feb. 1973); CPM-7304E0347

Fursaev, A. V.—Dependence of the Electro-Excitation Cross Section of Some Light Nuclei on the Choice of the Coupling Scheme (T)—V. K. Tartakovskiĭ and A. V. Fursaev. 15(1), 31–3 (Jul. 1972); CPM-7209C0983

G

Gaĭ, E. V.—E2 Transition Probabilities in the Asymmetric Rigid Rotor Model (T)—E. V. Gaĭ and N. S. Rabotnov. 15(4), 396–8 (Oct. 1972); CPM-7212D1941

—Probabilities of E2 Transitions and Mean Values of Quadrupole Moments of High Spin States in the Asymmetric Top Model (T)—E. V. Gaĭ and N. S. Rabotnov. 16(2), 159–61 (Feb. 1973); CPM-7304E0262

—Construction of Physical Bases for the Groups O(5) and SU(3) with Automatic Performance of Symbolic Transformations (T)—V. N. Vinogradov, E. V. Gaĭ, S. I. Popov, N. S. Rabotnov and I. B. Shchenkov. 16(6), 647–52 (Jun. 1973); CPM-7310E1495

Gaĭsak, M. I.—Baryons and Pseudoscalar Mesons in Broken Nonlinear Chiral SU(3) ×SU(3) Dynamics (T)—M. I. Gaĭsak and V. Ya. Sabo. 16(1), 109–11 (Jan. 1973); CPM-7304E0213

Gal'pera, E. S.—The Hilbert–Schmidt Expansion for Three-Particle Amplitudes (T)—I. M. Narodetskiĭ, E. S. Gal'pern and V. N. Lyakhovitskiĭ. 16(4), 395–9 (Apr. 1973); CPM-7309D1111

Gamaliĭ, A. F.—Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamaliĭ, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Ganenko, V. B.—Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Gangrskiĭ, Yu. P.—Measurement of the Excitation Energy of the Spontaneously Fissioning Isomer Pu^{239}(γ,n) (E)—Yu. P. Gangrskiĭ, V. N. Markov, I. F. Kharisov and Yu. M. Tsipenyuk. 16(2), 151–4 (Feb. 1973); CPM-7304E0254

—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Gaponov, Yu. V.—Isobaric Configuration 0^+ States, Proton–Neutron Hole in a Spherical Nucleus (T)—Yu. V. Gaponov and Yu. S. Lyutostanskiĭ. 16(3), 270–6 (Mar. 1973); CPM-7306D0366

Gasparyan, A. P.—Analysis of the $np \to pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaĭdalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Gavrilov, K. A.—Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. É. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

Gedalin, É. V.—Dual Resonance Model for Non-Identical Regge Trajectories: N-Reggeon Vertex (T)—É. V. Gedalin. 15(1), 83–6 (Jul. 1972); CPM-7209C1035

Gellikman, B. T.—Asymmetry of Nuclear Fission with Allowance for Quantum Effects (T)—B. T. Geĭlikman and O. V. Zimina. 15(3), 256–9 (Sep. 1972); CPM-7211A1885

Gendenshtein, L. É.—Inclusive Production of Particles and Antiparticles in the Central Region of the Spectrum and Resonant πN Scattering (T/E)—L. É. Gendenshtein and A. B. Kaidalov. 16(6), 720–3 (Jun. 1973); CPM-7310E1568

Genina, L. É.—Determination of the Spin–Parity of the $X^0(960)$ Meson in Proton–Antiproton Annihilation at Rest (E)—L. É. Genina, A. N. Zaslavskiĭ and R. Lednicky. 15(5), 571–3 (Nov. 1972); CPM-7302E0097

Gershtein, S. S.—On the Problem of Heavy Leptons (T)—S. S. Gershtein, L. G. Landsberg and V. N. Folomeshkin. 15(2), 195–7 (Aug. 1972); CPM-7210C1456

—Multifermion Interactions (T)—S. S. Gershtein and V. N. Folomeshkin. 15(3), 296–9 (Sep. 1972); CPM-7211A1925

Geshkenbein, V. B.—Certain Implications of Microcausality for the Matrix Element $\langle p|[A(x)B(0)]|p\rangle$ of the Commutator (T)—V. B. Geshkenbein. 16(3), 340–2 (Mar. 1973); CPM-7306D0436

Gevorkyan, S. R.—Double Charge Exchange of π Mesons on Nuclei at High Energies (T)—S. R. Gevorkyan, A. V. Tarasov and Ch. Tséren. 15(1), 34–7 (Jul. 1972); CPM-7209C0986

—Noncoherent Photoproduction of Vector Mesons on Nuclei at Large Momentum Transfers (T)—S. R. Gevorkyan and A. V. Tarasov. 15(2), 141–2 (Aug. 1972); CPM-7210C1402

—Radiation Corrections to the ep Scattering Cross Section at Small Angles with Detection of the Recoil Proton (T)—A. P. Vanzha, S. R. Gevorkyan and A. V. Tarasov. 16(2), 199–200 (Feb. 1973); CPM-7304E0302

–Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma = 2$ and 3 GeV. The Parameters of the Proton–Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Ginzburg, I. F.—Applicability of the Weizsäcker–Williams Approximation to Two–Photon Particle Production (T)—V. M. Budnev, I. F. Ginzburg, G. V. Medelin and V. G. Serbo. 16(2), 201–3 (Feb. 1973); CPM-7304E0304

Gladkikh, Z. S.—Cross Sections for Neutron–Induced Fission of Th ^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Gogokhiya, V. Sh.—Approximate Methods for Solving the Schrödinger Equation with a Singular Potential (T)—V. Sh. Gogokhiya and A. T. Filippov. 15(6), 714–9 (Dec. 1972); CPM-7302E0240

Gokhberg, B. M.—Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

—Angular Distributions of Fragments in Neutron–Induced Fission of Cf^{249} (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, G. A. Otroshchenko and V. A. Shigin. 16(4), 372–3 (Apr. 1973); CPM-7309D1088

Gol'dberg, M. P.—Analysis of the Proton Spectrum from the D(n,p)2n Reaction (E)—B. G. Skorodumov, M. P. Gol'dberg and Yu. N. Talanin. 15(3), 234–8 (Sep. 1972); CPM-7211A1863

Goloskokov, S. V.—Asymptotic Estimates of the Quasipotential Parameters (T)—S. V. Goloskokov and V. A. Matveev. 16(6), 715–7 (Jun. 1973); CPM-7310E1563

Golovanov, L. B.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Golovin, B. M.—Rescattering Effects in the pd→ppn Reaction (T)—B. M. Golovin, G. I. Lykasov, A. M. Rozanova and A. V. Tarasov. 16(5), 602–4 (May 1973); CPM-7309D1318

Golovkov, N. A.—Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894

Golubchikov, V. M.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Golutvin, I. A.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Gonchar, V. Yu.—Asymptotic Estimates of the Quasipotential Parameters (T)—S. V. Goloskokov and V. A. Matveev. 16(6), 715–7 (Jun. 1973); CPM-7310E1563

Grigoryan, G. V.—Electromagnetic Interaction of the Muon and the $K_L \to 2\mu$ Decay (T)—G. V. Grigoryan, N. N. Nikolaev and L. B. Okun'. 15(5), 554–5 (Nov. 1972); CPM-7302E0080

—Polarization Effects in Weak Interactions of Colliding e^+e^- and e^-e^- Beams at High Energies (T)—G. V. Grigoryan and V. A. Khoze. 16(5), 592–6 (May 1973); CPM-7309D1308

Grishanova, S. I.—Partial Widths and Strong Coupling of Channels (T)—S. I. Grishanova, S. D. Niledvin, N. N. Titarenko and E. L. Yadrovskiĭ. 15(3), 264–5 (Sep. 1972); CPM-7211A1893

Grishin, V. G.—Note Concerning the Symmetry of the Spectrum of the Longitudinal Pion Momenta in Semi-Inclusive $\pi^- p$ Interactions at p=4 GeV/c (E)—V. G. Grishin, Sh. V. Inogamov, B. S. Yuldashev and G. Jancso. 16(5), 611–2 (May 1973); CPM-7309D1327

Groshev, L. V.—Sr^{87} and Zr^{91} Fluorescence after the Capture of Thermal Neutrons (E)—L. V. Groshev, L. I. Govor and A. M. Demidov. 15(4), 347–8 (Oct. 1972); CPM-7212D1892

—De-Excitation of Even-Odd Nuclei in the Range $91 \leq N \leq 113$ After Capturing Thermal Neutrons (T)—L. V. Groshev, A. M. Demidov and L. L. Sokolovskiĭ. 16(3), 245–8 (Mar. 1973); CPM-7306D0341

Gubkin, I. A.—Proton Polarization in Coulomb Stripping Reactions (T)—I. A. Gubkin. 15(5), 513–4 (Nov. 1972); CPM-7302E0039

Gulkanyan, G. P.—Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15(1), 10–1 (Jul. 1972); CPM-7209C0962

Gul'karov, I. S.—Form Factors and Transition Densities of the Quadrupole and Octupole Vibrations of the C^{12} Nucleus (T)—I. S. Gul'karov. 16(4), 386–90 (Apr. 1973); CPM-7309D1102

Gulyamov, M.—Be^8 and B^8 Levels from (p,n) Reactions (E)—U. R. Arifkhanov, M. Gulyamov, B. I. Islamov and É. Ergashov. 15(6), 610 (Dec. 1972); CPM-7302E0136

Gurevich, G. S.—Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{1,2})C^{12}{}_{4,4.5}$, $B^{11}(\alpha, t_{1,2})C^{12}{}_{4,4.5}$, and $C^{12}(\alpha, \alpha_{1,2})C^{12}{}_{4.43}$ (E)—A. A. El-Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

Gurtovoĭ, M. E.—Excitation of Collective States of Some Medium Nuclei by 14-MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoi, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

Gus'kov, B. N.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Guzhavin, V. M.—Absorptive Model and the Reactions $\pi^- p \to p\gamma$ and $\pi^- p \to p^0 n$ at a Momentum 3.25 GeV/c (T)—V. M. Guzhavin and M. S. Dubovikov. 16(2), 229–31 (Feb. 1973); CPM-7304E0332

—Absorption Model and Spin Parity of the B Meson (T)—V. M. Guzhavin and M. S. Dubovikov. 16(3), 320–2 (Mar. 1973); CPM-7306D0416

Guzhavin, V. N.—Investigation of the Reaction $\pi^- p \to p\gamma p$ and $\pi^- p \to p^0 n$ at Incident Momentum 3–8 GeV/c by the Complex Angular Momentum Method (E)—V. N. Guzhavin, A. B. Kaidalov and A. F. Nilov. 15(1), 93–6 (Jul. 1972); CPM-7209C1045

—One More Version of the Absorptive One Pion Exchange Model (T)—V. N. Guzhavin and N. S. Dubovikov. 15(2), 198–202 (Aug. 1972); CPM-7210C1459

Guzhavin, V. V.—Angular and Spatial Distributions of Particles of Electron–Photon Shower Particles (T)—V. V. Guzhavin, I. P. Ivanenko, A. A. Kirillov and Yu. P. Paskhalov. 15(3), 278–81 (Sep. 1972); CPM-7211A1907

—Lateral Distribution of Electrons in an Inhomogeneous Atmosphere (T)—V. V. Guzhavin, I. P. Ivanenko and Yu. I. Paskhalov. 16(4), 417–20 (Apr. 1973); CPM-7309D1133

Guzhovskiĭ, B. Ya.—Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

H

Hubert, W.—Cascade Curves and Fluctuations of Average Characteristics of the Development of Showers Produced by 1600-MeV γ Quanta in Liquid Xenon (E)—B. Slowinski, Z. Strugalski and W. Hubert. 16(4), 410–1 (Apr. 1973); CPM-7309D1126

Hussein, F. A.—Radiation of p-Levels of Even-Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16(1), 1–5 (Jan. 1973); CPM-7304E0105

I

Ignatyuk, A. V.—Structure of the One-Particle Spectrum and Energy Dependence of Γ_f/Γ_n (T)—A. V. Ignatyuk, G. N. Smirenkin and A. S. Tishin. 15(6), 622–5 (Dec. 1972); CPM-7302E0148

—Density of Excited Particle Hole States in the Shell Model (E)—A. V. Ignatyuk and Yu. V. Sokolov. 16(2), 155–8 (Feb. 1973); CPM-7304E0258

Il'inov, A. S.—Angular Distribution of Neutrons Produced by Irradiating Ge, Mo, Ag, and Pr Targets with Heavy Ions of C, O, Ne, and Ar (E)—A. S. Il'inov, S. A. Karamyan, Tack An Nguyen and K. N. Sharifov. 16(3), 260–2 (Mar. 1973); CPM-7306D0356

Inogamov, Sh. V.—Note Concerning the Symmetry of the Spectrum of the Longitudinal Pion Momenta in Semi-Inclusive $\pi^- p$ Interactions at p=4 GeV/c (E)—V. G. Grishin, Sh. V. Inogamov, B. S. Yuldashev and G. Jancso. 16(5), 611–2 (May 1973); CPM-7309D1327

Inopin, E. V.—Elastic and Inelastic Glauber Scattering of Protons by C^{12} in the α-Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(1), 38–41 (Jan. 1973); CPM-7304E0142

—Excitation of Nuclear Vibrational Levels by Electrons According to the α-Particle Model (T)—A. N. Antonov and E. V. Inopin. 16(2), 182–4 (Feb. 1973); CPM-7304E0285

Ioffe, B. L.—Erratum: Neutral Currents and the Limit of Validity of the Theory of Weak Interactions [6, 603 (,4)] (T)—B. L. Ioffe and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Issaev, P. S.—The Reaction $\gamma + \gamma \to \pi^- + \pi^+$ and the Pion Electromagnetic Mass Difference (T)—P. S. Issev and V. I. Khleskov. 16(5), 559–64 (May 1973); CPM-7309D1275

Islamov, B. I.—Be^8 and B^8 Levels from (p,n) Reactions (E)—U. R. Arifkhanov, M. Gulyamov, B. I. Islamov and É. Ergashov. 15(6), 610 (Dec. 1972); CPM-7302E0136

Israelyan, M. Kh.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma \approx 2$ and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Istatkov, Ts. G.—On the Decay Mode $\mu^+ \to e^+ \nu_e \bar{\nu}_\mu e^+ e^-$ (T)—D. Yu. Bardin, Ts. G. Istatkov and G. B. Mitsel'makher. 15(2), 161–2 (Aug. 1972); CPM-7210C1422

Itkis, M. G.—Fission in Po^{210} Induced by $Pb^{206}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

—Study of Phase Transition in the Density of the Excited States of Even-Even Pb Nuclei in the (α, f) Reaction (E)—V. N. Okolovich, M. G. Itkis, K. G. Kuvatov and G. N. Smirenkin. 16 (6), 631–3 (Jun. 1973); CPM-7310E1479

Ivanchenko, I. M.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Ivanenko, I. P.—Angular and Spatial Distributions of Particles of Electron–Photon Shower Particles (T)—V. V. Guzhavin, I. P. Ivanenko, A. A. Kirillov and Yu. P. Paskhalov. 15(3), 278–81 (Sep. 1972); CPM-7211A1907

—Lateral Distribution of Electrons in an Inhomogeneous Atmosphere (T)—V. V. Guzhavin, I. P. Ivanenko and Yu. I. Paskhalov. 16(4), 417–20 (Apr. 1973); CPM-7309D1133

Ivanov, A. N.—Calculation of the Electromagnetic Mass Difference of Pions in Chiral Dynamics (T)—A. N. Ivanov. 15(1), 64–70 (Jul. 1972); CPM-7209C1016

Ivanov, O. L.—Angular Measurements of γ-Radiation Yield in Ternary Fission of Cf^{252} (E)—O. I. Ivanov. 15(6), 620–1 (Dec. 1972); CPM-7302E0146

Ivanov, R. B.—Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894

Ivanov, V. B.—Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamalii, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Ivanova, S. P.—Excitation of 0^+ States in Two-Nucleon Transfer Reactions (E)—S. K. Abdulvagabova, S. P. Ivanova and N. I. Pyatov. 16(6), 665–9 (Jun. 1973); CPM-7310E1513

J

Jafar, J. D.—Radiation of p-Levels of Even–Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16(1), 1–5 (Jan. 1973); CPM-7304E0105

Jancso, G.—Note Concerning the Symmetry of the Spectrum of the Longitudinal Pion Momenta in Semi-Inclusive $\pi^- p$ Interactions at p=4 GeV/c (E)—V. G. Grishin, Sh. V. Inogamov, B. S. Yuldashev and G. Jancso. 16(5), 611–2 (May 1973); CPM-7309D1327

Jankauskas, K.—Calculation of Nuclear Deformation of the U(3(A–1)) Scheme Model (T)—A. Petrauskas, G. Kamuntavicius and K. Jankauskas. 16(2), 168–72 (Feb. 1973); CPM-7304E0271

K

Kabachnik, N. M.—Knock-Out Reactions in Quasielastic and Antiquasielastic Kinematics (T)—V. V. Balashov, N. M. Kabachnik and N. N. Titarenko. 16(5), 622(L) (May 1973); CPM-7309D1338

Kadmenskii, S. G.—Absolute Probabilities of the α Decay of Even–Even Nuclei with $174 \leq A \leq 232$ and Superfluidity (T)—S. G. Kadmenskii, V. E. Kalechits and A. A. Martynov. 16(4), 400–4 (Apr. 1973); CPM-7309D1116

Kafiev, Yu. H.—Dynamic Model for the 33 Phase Shift of πN Scattering (T)—A. N. Vall, Yu. H. Kafiev and V. V. Serebryakov. 16(1), 106–8 (Jan. 1973); CPM-7304E0210

Kaganovich, A. B.—Current Algebra and the Problem of Cancellation of the Divergences in the Isotopic $\Delta T=2$ Mass Differences (T)—A. B. Kaganovich. 15(5), 561–4 (Nov. 1972); CPM-7302E0087

—Dynamical Chiral Symmetry and Cancellation of Divergences in the Mass Differences of Members of the A_1, ρ and π Meson Isomultiplets (T)—A. B. Kaganovich. 15(6), 691–5 (Dec. 1972); CPM-7302E0217

Kaidalov, A. B.—Investigation of the Reaction $\pi^- p \to \varphi^- p$ and $\pi^- p \to \varphi^0 n$ at Incident Momentum 3–8 GeV/c by the Complex Angular Momentum Method (E)—V. N. Guzhavin, A. B. Kaidalov and A. F. Nilov. 15(1), 93–6 (Jul. 1972); CPM-7209C1045

—Model of Reggeized One-Pion Exchange and the $pp \to pn\pi^+$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskii and L. A. Ponomarev. 15(2), 203–8 (Aug. 1972); CPM-7210C1464

—Analysis of the $np \to pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaidalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

—Connection between the Total Interaction Cross Section and the Slope of the Diffraction Peak (T)—A. B. Kaidalov. 16(2), 217–9 (Feb. 1973); CPM-7304E0320

—Inclusive Production of Particles and Antiparticles in the Central Region of the Spectrum and Resonant πN Scattering (T/E)—L. E. Gendenshtein and A. B. Kaidalov. 16(6), 720–3 (Jun. 1973); CPM-7310E1568

Kaipov, D. K.—Lifetime of the 2.734-MeV Level of Sr^{88} (E)—D. K. Kaipov, Yu. G. Kosyak, L. N. Smirin and Yu. K. Subnyi. 15(6), 603–4 (Dec. 1972); CPM-7302E0129

Kalashnikov, N. P.—Scattering of Fast Particles by an Effectively Growing Potential (T)—N. P. Kalashnikov and V. D. Mur. 16(5), 613–6 (May 1973); CPM-7309D1329

Kalchenko, A. I.—Level Density of Compound Nuclei with A=130–200 and Other Nuclear Properties (E)—V. P. Vertebnyi, A. I. Kalchenko and M. V. Pasechnik. 16(1), 19–20 (Jan. 1973); CPM-7304E0123

Kalechits, V. E.—Absolute Probabilities of the α Decay of Even–Even Nuclei with $174 \leq A \leq 232$ and Superfluidity (T)—S. G. Kadmenskii, V. E. Kalechits and A. A. Martynov. 16(4), 400–4 (Apr. 1973); CPM-7309D1116

Kalinauskas, R. A.—Ratios of the Internal Conversion Coefficients for M4 Transitions in the Nuclei $Te^{121,123,125,127,129}$ (E)—R. A. Kalinauskas, K. V. Makaryunas and R. I. Davidonis. 15(4), 350–1 (Oct. 1972); CPM-7212D1895

Kalpakchieva, R.—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Kamanin, V. V.—Measurement of Compound-Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

—Lifetimes of Excited Compound Nuclei in the Range $79<Z<89$, Measured by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, F. Normuratov and S. P. Tret'yakova. 16(3), 249–52 (Mar. 1973); CPM-7306D0345

Kamerdzhiev, S. P.—E1 and E2 Transitions in Medium and Heavy Spherical Nuclei (E)—S. P. Kamerdzhiev. 15(4), 379–86 (Oct. 1972); CPM-7212D1924

Kamuntavicius, G.—Calculation of Nuclear Deformation of the U(3(A–1)) Scheme Model (T)—A. Petrauskas, G. Kamuntavicius and K. Jankauskas. 16(2), 168–72 (Feb. 1973); CPM-7304E0271

Kanashevich, V. I.—Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Karabanov, N. V.—The (α, t) Reaction in Li^7 and B^{11} (E)—O. I. Vasil'eva, N. V. Karabanov, V. M. Lebedev, A. V. Spasskii and I. B. Teplov. 16(3), 257–9 (Mar. 1973); CPM-7306D0353

Karamyan, S. A.—Energy Balance in Fission by Heavy Ions (E)—S. A. Karamyan, Tak An Nguyen and K. N. Sharifov. 15(3), 244–8 (Sep. 1972); CPM-7211A1873

—Compound Nucleus Production by Accelerated Xenon Ions (E)—G. N. Flerov, S. A. Karamyan, G. S. Popeko, A. G. Popeko and I. A. Shelaev. 15(6), 618–9 (Dec. 1972); CPM-7302E0144

—Measurement of Compound-Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

—Lifetimes of Excited Compound Nuclei in the Range $79<Z<89$, Measured by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, F. Normuratov and S. P. Tret'yakova. 16(3), 249–52 (Mar. 1973); CPM-7306D0345

—Angular Distribution of Neutrons Produced by Irradiating Ge, Mo, Ag, and Pr Targets with Heavy Ions of C, O, Ne, and Ar (E)—A. S. Il'inov, S. A. Karamyan, Tack An Nguyen and K. N. Sharifov. 16(3), 260–2 (Mar. 1973); CPM-7306D0356

—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Karamyan, Zh. K.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskii, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

Karnaukhov, V. A.—Experiments Aimed at Finding Proton Decay from the Ground State (E)—D. D. Bogdanov, V. P. Bochin, V. A. Karnaukhov and L. A. Petrov. 16(5), 491–6 (May 1973); CPM-7309D1207

Karpikhin, I. L.—P-Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

Kartamyshev, A. A.—The Reaction $\pi p \to \pi^- \pi^+ n$ at $p_\pi = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

—$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_\pi = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Karzhavina, E. N.—Neutron Resonances of Sm Isotopes (E)—E. N. Karzhavina and A. B. Popov. 15(3), 225–7 (Sep. 1972); CPM-7211A1854

Kasilov, V. I.—Photofission and Photofragmentation of Tantalum (E)—V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 15(3), 228–31 (Sep. 1972); CPM-7211A1857

—Anisotropy in the Angular Distribution of Fragments from Photofission at High Energies (E)—N. A. Demëkhina, V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 16(5), 502–4 (May 1973); CPM-7309D1218

Katkov, V. M.—Erratum: Higher-order Effects in External Field: Pair Production by a Particle [14, 572 (,5)] (T)—V. N. Baier, V. M. Katkov and V. M. Strakhovenko. 15(1), 118 (Jul. 1972); CPM-7209C1070

Kazanskaya, A. P.—Production of Fast Helium and Triton Nuclei in an Interaction of High-Energy Pions with Heavy Emulsion Nuclei (E)—A. I. Borisenko, A. P. Kazanskaya, P. V. Morozova, Zh. S. Takibaev and N. S. Titova. 15(4), 419–22 (Oct. 1972); CPM-7212D1964

Kazarinov, N. M.—Cf^{252} Fission Neutrons (E)—M. V. Blinov, N. M. Kazarinov and I. T. Krisyuk. 16(6), 634–7 (Jun. 1973); CPM-7310E1482

Kazaryan, G. Kh.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma \approx 2$ and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Keropyan, M. L.—Analysis of Theoretical and Experimental Data on the Multiplicity of Shower Particles in High-Energy Hadron Interactions (R)—V. V. Avakyan, M. I. Keropyan and É. A. Mamidzhanyan. 16(4), 423–5 (Apr. 1973); CPM-7309D1139

Khabakhpashev, A. G.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Khalil, M. A.—Spectra of γ Rays Produced in Si^{30} and S^{34} Capture of Thermal Neutrons (E)—Dzh. D. Dzhafar, A. A. Abdullah, N. Kh. Al-Kuraishi, M. S. Al'vash, M. A. Khalil and A. M. Demidov. 15(6), 605–7 (Dec. 1972); CPM-7302E0131

—Radiation of p-Levels of Even-Odd Nuclei with $21 \leq A \leq 41$ in Cascade Emission Following Capture of Thermal Neutrons (E)—A. M. Demidov, J. D. Jafar, M. A. Khalil and F. A. Hussein. 16(1), 1–5 (Jan. 1973); CPM-7304E0105

Khalilov, V. R.—Induced Emission of Electrons in Plane Electromagnetic Waves (T)—I. M. Ternov and V. R. Khalilov. 16(1), 94–8 (Jan. 1973); CPM-7304E0198

Kham'yanov, L. P.—Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamalii, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Khangulyan, V. A.—Spin Effects in Production of Quasinuclear Mesons by Antiprotons (T)—O. D. Dal'karov, V. B. Mandel'tsveig and V. A. Khangulyan. 15(1), 100–2 (Jul. 1972); CPM-7209C1052

—Dependence of Polarization Effects in Direct Nuclear Reactions on the Total Angular Momentum of an Exchanged Particle (T)—V. M. Kolybasov and V. A. Khangulyan. 15(5), 520–2 (Nov. 1972); CPM-7302E0046

Kharashvili, G. I.—Production of Slow Pions in Interactions between High Energy Particles and Nuclei (E)—N. I. Kostanashvili, G. I. Debedevich, D. S. Nabichvrishvili and G. I. Kharashvili. 16(5), 542–5 (May 1973); CPM-7309D1258

Kharchenko, V. F.—Short-Range Nucleon–Nucleon Repulsion and Low-Energy Three–Nucleon Parameters (T)—V. F. Kharchenko, S. A. Shadchin and S. A. Storozhenko. 15(5), 493–6 (Nov. 1972); CPM-7302E0019

—Solution of the Skornyakov–Ter-Martirosyan Equations for Three Nucleons with Cutoff at Large Momenta (T)—V. F. Kharchenko. 16(2), 173–5 (Feb. 1973); CPM-7304E0276

Kharisov, I. F.—Measurement of the Excitation Energy of the Spontaneously Fissioning Isomer $Pu^{239}(\gamma,n)$ (E)—Yu. P. Gangrskiĭ, V. N. Markov, I. F. Kharisov and Yu. M. Tsipenyuk. 16(2), 151–4 (Feb. 1973); CPM-7304E0254

—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Kharkevich, G. I.—Nonconservation of P–Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoi, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Kharzheev, Yu. N.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Khazins, D. M.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+e^- n$ at $E_{\pi\,lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Kheifets, É. P.—Parton Model for $\gamma\gamma$ Scattering (T)—L. I. Perlovskii and É. P. Kheifets. 15(4), 435–7 (Oct. 1972); CPM-7212D1980

Khleskov, V. I.—The Reaction $\gamma + \gamma \to \pi^- + \pi$ and the Pion Electromagnetic Mass Difference (T)—P. S. Isaev and V. I. Khleskov. 16(5), 559–64 (May 1973); CPM-7309D1275

Khodyachikh, A. F.—Photodisintegration of He^4 into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Khokhlov, Yu. A.—Energy Dependence of $\bar{\nu}$ in the Fission of U^{235} by Fast Neutrons (E)—M. V. Savin, Yu. A. Khokhlov, A. E. Savel'ev and I. N. Paramonova. 16(6), 638–40 (Jun. 1973); CPM-7310E1486

Kholmetskaya, A. V.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

Kholodov, N. I.—Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

Khomich, A. A.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Khoze, V. A.—Electromagnetic Production of W-Meson Pairs (T)—N. L. Ter-Isaakyan and V. A. Khoze. 15(1), 51–5 (Jul. 1972); CPM-7209C1003

—Electromagnetic Mechanism of Inelastic Hadron Collision at High Energies (T)—S. G. Matinyan, N. L. Ter-Isaakyan, V. A. Khoze and Yu. G. Shakhnazaryan. 16(4), 440–4 (Apr. 1973); CPM-7309D1156

—Polarization Effects in Weak Interactions of Colliding e^+e^- and e^-e^- Beams at High Energies (T)—G. V. Grigoryan and V. A. Khoze. 16(5), 592–6 (May 1973); CPM-7309D1308

Khriplovich, I. B.—The Problem of Violation of Causality in the Motion of High-Spin Particles in an External Field (T)—I. B. Khriplovich. 16(4), 457–63 (Apr. 1973); CPM-7309D1173

Khristiansen, G. B.—Increase in the Transverse Moments in Nuclear Interactions at Energies $\geq 10^{12}$ eV from EAS Data (E)—Yu. A. Fomin and G. B. Khristiansen. 15(4), 423–6 (Oct. 1972); CPM-7212D1968

—Generation and Interaction of Muons with Energies $E_\mu \sim 10^{12}$ eV (E)—G. B. Khristiansen, O. V. Vedenev and Yu. A. Nechin. 15(5), 538–42 (Nov. 1972); CPM-7302E0064

Khristiansen, G. V.—Analysis of Present Experimental Data on Ultra-high-energy Cosmic Rays (E)—G. V. Kulikov and G. V. Khristiansen. 15(4), 427–32 (Oct. 1972); CPM-7212D1972

Khristov, L. G.—The Real Part of the Amplitude for Elastic pd-Scattering at an Energy of 70 GeV (E)—V. I. Zayachki, L. G. Khristov, Z. M. Zlatanov and P. A. Devenski. 15(5), 528–9 (Nov. 1972); CPM-7302B0054

Khrustalev, O. A.—Connection of the Total Cross Section with the Diffraction Peak of Elastic Scattering (T)—V. I. Savrin, S. V. Semenov, N. E. Tyurin and O. A. Khrustalev. 16(2), 214–6 (Feb. 1973); CPM-7304E0317

Khrylin, B. A.—Influence of Majorana Forces on the Properties of p-Shell Hypernuclei (T)—A. B. Kochetov and B. A. Khrylin. 16 (1), 25–6 (Jan. 1973); CPM-7304E0129

Khudaverdyan, A. G.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma \approx 2$ and 3 GeV. The Parameters of the Proton–Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Khurshudyan, L. S.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma \approx 2$ and 3 GeV. The Parameters of the Proton–Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, E. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Khvastunov, V. M.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Kienzle, W.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Kienzle-Focacci, M. N.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Kil'dyushov, M. S.—Hyperspherical Functions of the "Tree" Type in the n-Body Problem (T)—M. S. Kil'dyushov. 15(1), 113–7 (Jul. 1972); CPM-7209C1065

—The n-Body Problem. Matrix Elements of Permutations (T)—M. S. Kil'dyushov. 16(1), 117–9 (Jan. 1973); CPM-7304E0221

Kirichenko, M. V.—An Investigation of the (n, α) Reaction Between 4.9-MeV Neutrons and Light Nuclei of a Photographic Emulsion (E)—M. V. Kirichenko and Z. I. Solov'eva. 16(1), 9–10 (Jan. 1973); CPM-7304E0113

Kirillov, A. A.—Angular and Spatial Distributions of Particles of Electron–Photon Shower Particles (T)—V. V. Guzhavin, I. P. Ivanenko, A. A. Kirillov and Yu. P. Paskhalov. 15(3), 278–81 (Sep. 1972); CPM-7211A1907

Kirillova, L. F.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Kirzhnits, D. A.—Ultra-high-Energy Cosmic Rays and a Possible Generalization of Relativistic Theory (T)—D. A. Kirzhnits and V. A. Chechin. 15(5), 585–9 (Nov. 1972); CPM-7302E0111

—Sum Rules for Potential Scattering (T)—D. A. Kirzhnits and N. Zh. Takibaev. 16(2), 242–3(L) (Feb. 1973); CPM-7304E0345

Kiss, D.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Kladnitskiĭ, V. S.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Klanner, R.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Klepikov, N. P.—Geometrical Approach to the Investigation of Kinematic Symmetries of Free Particle Systems (T)—N. P. Klepikov and G. Yu. Bogoslovskiĭ. 16(4), 478–82 (Apr. 1973); CPM-7309D1194

Knat'ko, V. A.—Doorway States of "Phonon + Particle" Type in (n, γ) Reactions on N=28 and N=82 Nuclei (E)—V. A. Knat'ko and E. A. Rudak. 15(6), 626–8 (Dec. 1972); CPM-7302E0152

Knyaz'kov, V. A.—Nonconservation of P-Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoĭ, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Knyr, V. A.—Rigid Asymmetrical Rotator and Deformability of Nuclei (T)—A. D. Fedorov and V. A. Knyr. 16(4), 376–9 (Apr. 1973); CPM-7309D1092

Kobrinskiĭ, M. N.—Muon Pair Production in μp Collisions (E)—M. N. Kobrinskiĭ and F. F. Tikhonin. 15(6), 685–6 (Dec. 1972); CPM-7302E0211

Kobylinskiĭ, N. A.—$\bar{N}N \to 3\pi$ Annihilation in Dual Models (T)—A. I. Bugriĭ, L. L. Enkovskiĭ and N. A. Kobylinskiĭ. 15(6), 699–701 (Dec. 1972); CPM-7302E0225

Kobzev, A. P.—Optical Radiation Excited by Nonrelativistic Charged Particles at Metal Surfaces (E)—A. P. Kobzev, S. Michalak, E. Rutkowski and I. M. Frank. 15(2), 184–8 (Aug. 1972); CPM-7210C1445

Kochetov, A. B.—Influence of Majorana Forces on the Properties of p-Shell Hypernuclei (T)—A. B. Kochetov and B. A. Khrylin. 16 (1), 25–6 (Jan. 1973); CPM-7304E0129

Kolesnikova, L. N.—Angular Distributions of 13.7-MeV Neutrons Elastically Scattered by the Isotopes $Pb^{206,207,208}$ (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 369–71 (Oct. 1972); CPM-7212D1914

—Inelastic Scattering of 13.7 MeV Neutrons by Lead Isotopes (E)—G. E. Belovitskiĭ, L. N. Kolesnikova and I. M. Frank. 15(4), 372–4 (Oct. 1972); CPM-7212D1917

Kolkunov, V. A.—Quasiclassical Expansion and the Exponential Method (T)—V. A. Kolkunov and V. N. Melnikov. 16(5), 617–21 (May 1973); CPM-7309D1333

Kolpakov, A. V.—The Vavilov–Cerenkov Effect in the X-Ray Wavelength Region (T)—A. V. Kolpakov. 16(5), 554–5 (May 1973); CPM-7309D1270

Kolybasov, V. M.—Polarization Effects in (p, 2p) Reaction (T)—V. M. Kolybasov and N. Ya. Smorodinskaya. 15(3), 269–72 (Sep. 1972); CPM-7211A1898

—Dependence of Polarization Effects in Direct Nuclear Reactions on the Total Angular Momentum of an Exchanged Particle (T)—V. M. Kolybasov and V. A. Khangulyan. 15(5), 520–2 (Nov. 1972); CPM-7302E0046

Komarov, V. I.—Energy Dependence of Elastic Backward Scattering of Protons by Deuterons in the 360–670 MeV Range (E)—V. I. Komarov, G. E. Kosarev, G. P. Reshetnikov and O. V. Savchenko. 16(2), 129–33 (Feb. 1973); CPM-7304E0232

Kondratyuk, L. A.—Two-Photon Exchange in Large-Angle Scattering of High-Energy Electrons by Light Nuclei (T)—V. N. Boitsov, L. A. Kondratyuk and V. B. Kopeliovich. 16(3), 287–91 (Mar. 1973); CPM-7306D0383

Kopaleishvili, T. I.—Excitation Spectrum of Residual Nuclei in (π^-, nn) Reaction (E)—T. I. Kopaleishvili, I. Z. Machabeli and M. Sh. Chachkhnunashvili. 15(6), 629–31 (Dec. 1972); CPM-7302E0155

Kopeliovich, B. Z.—Coherent Production of Ω^- and Ξ Hyperons on Nuclei and the Determination of Their Spin and Parity (T)—B. Z. Kopeliovich. 16(3), 326–31 (Mar. 1973); CPM-7306D0422

Kopeliovich, V. B.—Two-Photon Exchange in Large-Angle Scattering of High-Energy Electrons by Light Nuclei (T)—V. N. Boitsov, L. A. Kondratyuk and V. B. Kopeliovich. 16(3), 287–91 (Mar. 1973); CPM-7306D0383

—$pN \to NNKK$ Reactions in Models with Single-Kaon Exchange (T)—V. B. Kopeliovich. 16(3), 323–5 (Mar. 1973); CPM-7306D0419

Kopylov, G. I.—Possibilities of Resonance Interferometers (T)—G. I. Kopylov. 15(1), 103–7 (Jul. 1972); CPM-7209C1055

—Correlations of Identical Particles Emitted by Highly Excited Nuclei (T)—G. I. Kopylov and M. I. Podgoretskiĭ. 15(2), 219–23 (Aug. 1972); CPM-7210C1480

Kornienko, N. D.—Use of the Perturbed Angle $e_{\gamma\gamma\gamma}$ Correlation to Measure the Hg^{197} 133-keV State g-Factor (E)—N. D. Kornienko, B. G. Kul'Chinskiĭ, A. I. Levon and O. F. Nemets. 15(4), 353–6 (Oct. 1972); CPM-7212D1898

Kosarev, G. E.—Energy Dependence of Elastic Backward Scattering of Protons by Deuterons in the 360–670 MeV Range (E)—V. I. Komarov, G. E. Kosarev, G. P. Reshetnikov and O. V. Savchenko. 16(2), 129–33 (Feb. 1973); CPM-7304E0232

Kostanashvili, N. I.—Production of Slow Pions in Interactions between High Energy Particles and Nuclei (E)—N. I. Kostanashvili, G. I. Bebedevich, D. S. Nabichvrishvili and G. I. Kharashvili. 16(5), 542–5 (May 1973); CPM-7309D1258

Kostochkin, O. I.—Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15(1), 12–6 (Jul. 1972); CPM-7209C0964

Kostylev, V. A.—Fission of U^{235} by Thermal Neutrons (E)—V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich and V. A. Kostylev. 16(4), 364–71 (Apr. 1973); CPM-7309D1080

Kostyuchenkov, S. D.—Correlation of α Particles and γ Rays from the Reaction $Al^{25}(p, \alpha_1\gamma)Mg^{24}$ for 6.40-MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Kosyak, Yu. G.—Lifetime of the 2.734-MeV Level of Sr^{88} (E)—D. K. Kaipov, Yu. G. Kosyak, L. N. Smirin and Yu. K. Subnyi. 15(6), 603–4 (Dec. 1972); CPM-7302E0129

Kosyakov, V. N.—Neutron Yield and Fragment Kinetic Energy in Thermal-Neutron-Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

—Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

Koutsidi, N. K.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^-$ + (1, 2, 3, 4, 5) π^0 AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Kovalenko, S. S.—Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15(1), 12–6 (Jul. 1972); CPM-7209C0964

Kovalev, A. M.—Influence of Excitation Energy on the Mass and Kinetic Energy Distributions of U^{233} Fission Fragments (E)—A. I. Sergachev, N. P. D'yachenko, A. M. Kovalev and B. D. Kuz'minov. 16(3), 266–9 (Mar. 1973); CPM-7306D0362

Kozhukhova, S.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^-$ + (1, 2, 3, 4, 5) π^0 AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Kozlovskiĭ, I. V.—Scattering of High-Energy Electrons by H^3 and He^3 Nuclei (T)—A. G. Sitenko, I. V. Kozlovskiĭ and V. K. Tartakovskiĭ. 15(4), 406–9 (Oct. 1972); CPM-7212D1951

—Two-Particle Electrodisintegration of He^3 (T)—I. V. Kozlovskiĭ, V. K. Tartakovskiĭ and A. D. Foursat. 16(3), 277–81 (Mar. 1973); CPM-7306D0373

Kozlowski, T.—Angular Distribution of Low Energy Neutrons from Nuclear μ^- Capture in Sulfur and Calcium (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski, A. A. Nikolina and V. S. Roganov. 15(5), 523–5 (Nov. 1972); CPM-7302E0049

—Neutron Energy Spectrum from Absorption of Negative Muons by O, S, Ca, and Pb Nuclei (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski and V. S. Roganov. 15(6), 639–44 (Dec. 1972); CPM-7302E0165

Krasil'nikov, D. D.—Development of Superhigh-Energy Electron-Photon Showers in the Atmosphere (T)—D. D. Krasil'nikov, V. P. Kulakovskaya and S. I. Nikol'skiĭ. 15(1), 47–50 (Jul. 1972); CPM-7209C0999

Krasnokutskiĭ, R. N.—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Krasnov, L. V.—Examination of Distorted Wave Method for Stripping Reactions to Resonant States (T)—V. E. Bunakov, K. A. Gridnev and L. V. Krasnov. 15(5), 508–12 (Nov. 1972); CPM-7302E0034

Krisyuk, I. T.—Cf^{252} Fission Neutrons (E)—M. V. Blinov, N. M. Kazarinov and I. T. Krisyuk. 16(6), 634–7 (Jun. 1973); CPM-7310E1482

Krive, I. V.—Electroproduction of Strange Particles on Nucleons Near the Threshold (E)—I. V. Krive. 16(5), 556–8 (May 1973); CPM-7309D1272

Krivokhizhin, V. G.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Kruglov, S. P.—Calculation of Electron-Proton Showers Produced in Lead by Electrons and γ Rays with Energies from 50 to 400 MeV (T)—M. Ya. Borkovskiĭ and S. P. Kruglov. 16(2), 194–8 (Feb. 1973); CPM-7304E0297

Krupennikova, N. B.—Magnetic Moments of Three-Particle Nuclei (T)—N. B. Krupennikova. 15(3), 260–1 (Sep. 1972); CPM-7211A1889

Kucher, A. M.—Measurement of Compound-Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

Kukhlenko, A. S.—Excitation of Collective States of Some Medium Nuclei by 14-MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoĭ, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

Kukhtin, V. V.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

—Application of the Methods of Statistical Mechanics to Dual Resonance Models (T)—G. P. Demchenko, V. V. Kukhtin and B. V. Struminskiĭ. 16(5), 511–3 (May 1973); CPM-7309D1227

Kuks, I. M.—Search for Fission Isomers in the Radium Region (E)—I. M. Kuks, V. I. Matvienko, Yu. A. Nemilov, Yu. A. Selitskiĭ and V. B. Funshtein. 16(2), 244(L) (Feb. 1973); CPM-7304E0347

Kulakovskaya, V. P.—Development of Superhigh-Energy Electron–Photon Showers in the Atmosphere (T)—D. D. Krasil'nikov, V. P. Kulakovskaya and S. I. Nikol'skiĭ. 15(1), 47–50 (Jul. 1972); CPM-7209C0999

Kul'Chinskiĭ, B. G.—Use of the Perturbed Angle $e_{\gamma\gamma\gamma}$ Correlation to Measure the Hg^{197} 133-keV State g-Factor (E)—N. D. Kornienko, B. G. Kul'Chinskiĭ, A. I. Levon and O. F. Nemets. 15(4), 353–6 (Oct. 1972); CPM-7212D1898

Kulikov, A. V.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Kulikov, G. V.—Analysis of Present Experimental Data on Ultra-high-energy Cosmic Rays (E)—G. V. Kulikov and G. V. Khristiansen. 15(4), 427–32 (Oct. 1972); CPM-7212D1972

Kulish, Yu. V.—Lepton Pair Production Processes in Pion–Nucleon Interactions (T)—Yu. V. Kulish. 16(5), 605–10 (May 1973); CPM-7309D1321

Kuptsov, A. V.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Kuraev, E. A.—Production of Electron and Muon Pairs in Colliding e^-e^- and e^+e^+ Pairs (T)—E. A. Kuraev and L. N. Lipatov. 16(5), 584–91 (May 1973); CPM-7309D1300

Kurbatov, V. S.—Model of the Partial-Wave Analysis of the Δ_{1236} Resonance Production Reactions $\pi N \to \pi\pi N$ Near Threshold with Allowance for the Triangle Graph Contribution (T)—S. A. Bunyatov, V. S. Kurbatov and A. K. Likhoded. 16(6), 705–8 (Jun. 1973); CPM-7310E1553

—Estimate of the $\pi\pi$ Scattering Length a_0 by the Method of Separating the Triangle Graph Contribution in the Reactions $\pi N \to \pi\pi N$ (T/E)—S. A. Bunyatov, V. S. Kurbatov, A. K. Likhoded and H. M. Staudenmaier. 16(6), 709–12 (Jun. 1973); CPM-7310E1557

Kurdadze, L. M.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Kutsarova, T.—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Kuvatov, K. G.—Po^{210} Fission in $Pb^{206}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

—Study of Phase Transition in the Density of the Excited States of Even–Even Pb Nuclei in the (α, f) Reaction (E)—V. N. Okolovich, M. G. Itkis, K. G. Kuvatov and G. N. Smirenkin. 16(6), 631–3 (Jun. 1973); CPM-7310E1479

Kuz'menko, V. S.—Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Kuz'minov, B. D.—Influence of Excitation Energy on the Mass and Kinetic Energy Distributions of U^{233} Fission Fragments (E)—A. I. Sergachev, V. P. D'yachenko, A. M. Kovalev and B. D. Kuz'minov. 16(3), 266–9 (Mar. 1973); CPM-7306D0362

Kuznetsov, B. I.—Elastic Scattering of 26.6-MeV α Particles by Light Nuclei (E)—B. I. Kuznetsov, R. E. Ovsyannikova and I. P. Chernov. 15(4), 377–8 (Oct. 1972); CPM-7212D1922

Kuznetsov, G. I.—Proper Singularities of One-loop n-gon Feynman Diagrams (T)—G. I. Kuznetsov. 15(4), 471–2 (Oct. 1972); CPM-7212D2016

—Partial Wave Analysis of NN and $\bar{N}N$ Scattering Amplitudes at High Energies (T)—G. I. Kuznetsov. 15(5), 576–81 (Nov. 1972); CPM-7302E0102

L

Landsberg, L. G.—On the Problem of Heavy Leptons (T)—S. S. Gershtein, L. G. Landsberg and V. N. Folomeshkin. 15(2), 195–7 (Aug. 1972); CPM-7210C1456

—Some Comments on the Search for Quarks Using a 70 GeV Accelerator (T/E)—A. M. Zaĭtsev and L. G. Landsberg. 15(6), 656–64 (Dec. 1972); CPM-7302E0182

—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roĭnishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Laperashvili, L. V.—Unitarization of the Veneziano Model and the Pomeron Problem (T)—L. V. Laperashvili. 15(3), 317–21 (Sep. 1972); CPM-7211A1946

—Production of a Spin-J Resonance in the Dual Resonance Model (T)—L. V. Laperashvili and M. G. Safro. 15(5), 567–70 (Nov. 1972); CPM-7302E0093

Lapidus, L. I.—Radiative Pion Capture by Hydrogen and Sign of Neutral Pion Decay Amplitude (E)—L. I. Lapidus and M. M. Musakhanov. 15(5), 558–60 (Nov. 1972); CPM-7302E0084

—Electromagnetic Effects in Expolarization in Meson–Nucleon Scattering (T)—A. P. Vanzha, L. I. Lapidus and A. V. Tarasov. 16 (5), 565–70 (May 1973); CPM-7309D1281

Laptev, S. V.—Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Lazarev, Yu. A.—Average Number of Prompt Neutrons in the Spontaneous Fission of Fm^{256} (E)—M. Dakovskiĭ, Yu. A. Lazarev and Yu. Ts. Oganesyan. 16(6), 641–2 (Jun. 1973); CPM-7310E1489

Lazurik-Él'tsufin, V. T.—Oscillations of a Fermi Liquid Drop and Giant Resonance in Medium and Heavy Nuclei (T)—I. A. Akhiezer, B. I. Barts and V. T. Lazurik-Él'tsufin. 15(5), 484–6 (Nov. 1972); CPM-7302E0010

Lebedev, A. A.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roĭnishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Lebedev, A. N.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma = 2$ and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Lebedev, V. M.—The (α, t) Reaction in Li^7 and B^{11} (E)—O. I. Vasil'eva, N. V. Karabanov, V. M. Lebedev, A. V. Spasskiĭ and I. B. Teplov. 16(3), 257–9 (Mar. 1973); CPM-7306D0353

Lechanoine, C.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roĭnishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Lecomte, P.—Missing-Mass Spectra Observed in the Reaction $\pi^- + p \rightarrow p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle-Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Lednicky, R.—Determination of the Spin-Parity of the $X^0(960)$ Meson in Proton-Antiproton Annihilation at Rest (E)—L. É. Genina, A. N. Zaslavskiĭ and R. Lednicky. 15(5), 571–3 (Nov. 1972); CPM-7302E0097

—Chiral Su(2) ×Su(2) Dynamics and the $\pi^+ p \rightarrow p^0 \Delta^{++}_{1236}$ Reaction Close to the Threshold (T/E)—A. N. Zaslavskiĭ and R. Lednicky. 16(2), 232–7 (Feb. 1973); CPM-7304E0335

Lendel, A. I.—t-Channel Contribution to Pion-Nucleon Backward Scattering (T)—A. I. Lendel and V. I. Lend'el. 15(1), 79–82 (Jul. 1972); CPM-7209C1031

Lend'el, V. I.—t-Channel Contribution to Pion-Nucleon Backward Scattering (T)—A. I. Lendel and V. I. Lend'el. 15(1), 79–82 (Jul. 1972); CPM-7209C1031

Leshchenko, B. E.—Excitation of Collective States of Some Medium Nuclei by 14-MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoĭ, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

Lev, F. M.—Deep Inelastic Lepton Pair Production in Neutrino Nucleus Scattering (T)—F. M. Lev. 15(5), 556–7 (Nov. 1972); CPM-7302E0082

Levich, A. P.—Nuclear Densities in the K-Harmonics Method (T)—A. P. Levich. 15(4), 404–5 (Oct. 1972); CPM-7212D1949

Levon, A. I.—Use of the Perturbed Angle $e_{\alpha\alpha\gamma}$ Correlation to Measure the Hg^{197} 133-keV State g-Factor (E)—N. D. Kornienko, B. G. Kul'Chinskiĭ, A. I. Levon and O. F. Nemets. 15(4), 353–6 (Oct. 1972); CPM-7212D1898

Likhachev, M. F.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Likhachev, V. P.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Likhoded, A. K.—Model of the Partial-Wave Analysis of the Δ_{1236} Resonance Production Reactions $\pi N \rightarrow \pi\pi N$ Near Threshold with Allowance for the Triangle Graph Contribution (T)—S. A. Bunyatov, V. S. Kurbatov and A. K. Likhoded. 16(6), 705–8 (Jun. 1973); CPM-7310E1553

—Estimate of the $\pi\pi$ Scattering Length a_0 by the Method of Separating the Triangle Graph Contribution in the Reactions $\pi N \rightarrow \pi\pi N$ (T/E)—S. A. Bunyatov, V. S. Kurbatov, A. K. Likhoded and H. M. Staudenmaier. 16(6), 709–12 (Jun. 1973); CPM-7310E1557

Lipatov, L. N.—Deep Inelastic ep Scattering in Perturbation Theory (T)—V. N. Gribov and L. N. Lipatov. 15(4), 438–50 (Oct. 1972); CPM-7212D1983

—e^+e^-—Pair Annihilation and Deep Inelastic ep Scattering in Perturbation Theory (T)—V. N. Gribov and L. N. Lipatov. 15(6), 675–84 (Dec. 1972); CPM-7302E0201

—Production of Electron and Muon Pairs in Colliding e^-e^- and e^-e^+ Pairs (T)—E. A. Kuraev and L. N. Lipatov. 16(5), 584–91 (May 1973); CPM-7309D1300

Lipmanov, É. M.—Possible Effect of Diagonalization of High-Energy Electromagnetic Interactions with Respect to Particle Helicities (T)—É. M. Lipmanov and N. V. Mikheev. 16(6), 682–5 (Jun. 1973); CPM-7310E1530

Lisin, V. I.—Model of Reggeized One-Pion Exchange and the $pp \rightarrow pn\pi^+$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskiĭ and L. A. Ponomarev. 15(2), 203–8 (Aug. 1972); CPM-7210C1464

—Tensor Constant of Weak Interaction Current of the Second Kind (T)—V. I. Lisin and G. A. Lobov. 16(3), 353–4(L) (Mar. 1973); CPM-7306D0449

Litvinenko, A. S.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Lizin, I. M.—Problems of Reduction for Compact Groups (T)—I. M. Lizin and L. A. Shelepin. 15(1), 108–12 (Jul. 1972); CPM-7209C1060

Lobashov, B. M.—Nonconservation of P-Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoĭ, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Lobov, G. A.—Tensor Constant of Weak Interaction Current of the Second Kind (T)—V. I. Lisin and G. A. Lobov. 16(3), 353–4(L) (Mar. 1973); CPM-7306D0449

Lomakin, Yu. F.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \rightarrow n\pi^+\pi^-(1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Lopatko, I. D.—Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Loshchakov, I. I.—Investigation of (p,pd) -Reaction on Light Nuclei at 50 MeV (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 15(3), 239–40 (Sep. 1972); CPM-7211A1868

—The $O^{16}(p, p\alpha)C^{12}$ Reaction with 50-MeV Protons (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 16(5), 497–8 (May 1973); CPM-7309D1213

Loskutov, Yu. M.—Modification of the Coulomb Law in a Uniform Static Magnetic Field (T)—Yu. M. Loskutov and V. V. Skobelev. 15(4), 433–4 (Oct. 1972); CPM-7212D1978

Lukin, E. S.—Charged Particle Distribution in Inelastic Proton-Neutron Interactions at 19.2 GeV/c (E)—É. G. Boos, B. O. Zhautykov, E. S. Lukin, A. M. Mosienko and R. A. Tursunov. 16(2), 187–8 (Feb. 1973); CPM-7304E0290

Luk'yanov, A. A.—Bound and Decaying States in the Theory of Resonance Nuclear Reactions (T)—A. A. Luk'yanov. 16(1), 45–9 (Jan. 1973); CPM-7304E0149

Lukyanov, V. N.—Analysis of Elastic Electron Scattering on Light Nuclei on the Basis of Symmetrized Fermi-Density Distribution (E/T)—Yu. N. Eldyshev, V. N. Lukyanov and Yu. S. Pol. 16(3), 282–6 (Mar. 1973); CPM-7306D0378

Lyakhovitskiĭ, V. N.—The Hilbert-Schmidt Expansion for Three-Particle Amplitudes (T)—I. M. Narodetskiĭ, E. S. Gal'pern and V. N. Lyakhovitskiĭ. 16(4), 395–9 (Apr. 1973); CPM-7309D1111

Lykasov, G. I.—Rescattering Effects in the $pd \rightarrow ppn$ Reaction (T)—B. M. Golovin, G. I. Lykasov, A. M. Rozanova and A. V. Tarasov. 16(5), 602–4 (May 1973); CPM-7309D1318

Lyubimov, A. L.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Lyutostanskiĭ, Yu. S.—Isobaric Configuration 0^+ States, Proton-Neutron Hole in a Spherical Nucleus (T)—Yu. V. Gaponov and Yu. S. Lyutostanskiĭ. 16(3), 270–6 (Mar. 1973); CPM-7306D0366

M

Machabeli, I. Z.—Excitation Spectrum of Residual Nuclei in (π^-, nn) Reaction (E)—T. I. Kopaleishvili, I. Z. Machabeli and M. Sh. Chachkhnunashvili. 15(6), 629–31 (Dec. 1972); CPM-7302E0155

Magradze, B. A.—K_{l3} Decays and Chiral Symmetry Breaking (T)—B. A. Magradze, M. N. Tsiguleva and M. A. Éliashvili. 15(3), 294–5 (Sep. 1972); CPM-7211A1923

Makarov, M. M.—The Charge-Exchange Reaction $\pi^+\pi^- \to \pi^0\pi^0$ and the S Meson (E/T)—M. M. Makarov and V. V. Nelyubin. 16(4), 426–8 (Apr. 1973); CPM-7309D1142

Makarynas, K. V.—Ratios of the Internal Conversion Coefficients for M4 Transitions in the Nuclei $Te^{121,123,125,127,129}$ (E)—R. A. Kalinauskas, K. V. Makaryunas and R. I. Davidonis. 15(4), 350–1 (Oct. 1972); CPM-7212D1895

Makeev, V. V.—Muon Production in the Process $\nu_\mu + N \to \mu^- + W^+ + N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

—The Process $\nu_\mu + N \to \mu^- + W^+ + N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+ \to l^+ + \nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

Makhviladze, T. M.—Cooperative Characteristics of Many-Particle Systems (T)—T. M. Makhviladze and L. A. Shelepin. 15(3), 335–40 (Sep. 1972); CPM-7211A1964

—Coherent States of Rotating Bodies (T)—T. M. Makhviladze and L. A. Shelepin. 15(5), 601–2 (Nov. 1972); CPM-7302E0127

Maksyutenko, B. P.—Genetic Connection between the Delayed–Neutron Radiation and the Fission Process (T)—B. P. Maksyutenko. 15(3), 251–5 (Sep. 1972); CPM-7211A1880

Malakyan, Yu. P.—Nonlinear Lagrangian of Two–Photon Production of Soft Pions (T)—Yu. P. Malakyan. 16(5), 571–5 (May 1973); CPM-7309D1287

Malinovskiĭ, E. I.—Ionization Loss of High–Energy Electrons (E)—A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov and P. N. Shareiko. 16(2), 189–90 (Feb. 1973); CPM-7304E0292

Malkin, L. Z.—Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15(1), 12–6 (Jul. 1972); CPM-7209C0964

Malyarov, V. V.—Inverse Problem in Complex λ Plane in the Presence of Coulomb Interaction with Allowance for Absorption (T)—V. V. Malyarov and I. V. Poplavskiĭ. 16(4), 483–5 (Apr. 1973); CPM-7309D1199

Mamidzhanyan, É. A.—Analysis of Theoretical and Experimental Data on the Multiplicity of Shower Particles in High–Energy Hadron Interactions (R)—V. V. Avakyan, M. I. Keropyan and É. A. Mamidzhanyan. 16(4), 423–5 (Apr. 1973); CPM-7309D1139

—Comparison of the Characteristics of the Interaction of Protons and Neutrons with C, Fe, and Pb Nuclei (E)—M. O. Azaryan, É. A. Mamidzhanyan, R. M. Martirosov and R. A. Suleimanov. 16(6), 678–81 (Jun. 1973); CPM-7310E1526

Manakov, N. L.—Coulomb Green's Functions in the x–Representation and Relativistic Polarizability of a Hydrogen–Like Atom (T)—B. A. Zon, N. L. Manakov and L. P. Rapoport. 15(3), 282–6 (Sep. 1972); CPM-7211A1911

Mandel'tsveig, V. B.—Spin Effects in Production of Quasinuclear Mesons by Antiprotons (T)—O. D. Dal'karov, V. B. Mandel'tsveig and V. A. Khangulyan. 15(1), 100–2 (Jul. 1972); CPM-7209C1052

Manida, S. N.—Analysis of a Dual Fermion Model (T)—S. N. Manida and V. A. Franke. 16(4), 429–32 (Apr. 1973); CPM-7309D1145

Manukyan, Zh. V.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma = 2$ and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Marinescu, M.—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Marinov, M. S.—Erratum: "Direct Production of Lepton Pairs by a Neutrino Beam in the Electromagnetic Field of a Nucleus [3, 497 (,4)] (T)—M. S. Marinov, Yu. P. Nikitin, Yu. P. Orevkov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Pair Production in an Electromagnetic Field (Case of Arbitrary Spin) (T)—M. S. Marinov and V. S. Popov. 15(6), 702–9 (Dec. 1972); CPM-7302E0228

—e^+e^- Pair Production in an Alternating Electric Field (T)—V. S. Popov and M. S. Marinov. 16(4), 449–56 (Apr. 1973); CPM-7309D1165

Markov, V. N.—Measurement of the Excitation Energy of the Spontaneously Fissioning Isomer $Pu^{239}(\gamma,n)$ (E)—Yu. P. Gangrskiĭ, V. N. Markov, I. F. Kharisov and Yu. M. Tsipenyuk. 16(2), 151–4 (Feb. 1973); CPM-7304E0254

Martin, M.—Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Martinska, G.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Martirosov, R. M.—Comparison of the Characteristics of the Interaction of Protons and Neutrons with C, Fe, and Pb Nuclei (E)—M. O. Azaryan, É. A. Mamidzhanyan, R. M. Martirosov and R. A. Suleimanov. 16(6), 678–81 (Jun. 1973); CPM-7310E1526

Martynov, A. A.—Absolute Probabilities of the α Decay of Even–Even Nuclei with $174 \leq A \leq 232$ and Superfluidity (T)—S. G. Kadmenskiĭ, V. E. Kalechits and A. A. Martynov. 16(4), 400–4 (Apr. 1973); CPM-7309D1116

Marutyan, N. A.—Investigation of Particles Produced at 90° in the Laboratory Frame in Nucleus–Nucleus Interactions (T)—N. A. Marutyan. 15(6), 654–5 (Dec. 1972); CPM-7302E0180

Matachun, A. T.—Influence of Single Scattering Processes on the Horizontal Fluxes of Cosmic Muons in Water (T)—A. T. Matachun, Yu. A. Trubkin and V. M. Fedorov. 16(2), 191–3 (Feb. 1973); CPM-7304E0294

Matinyan, S. G.—Electromagnetic Mechanism of Inelastic Hadron Collision at High Energies (T)—S. G. Matinyan, N. L. Ter–Isaakyan, V. A. Khoze and Yu. G. Shakhnazaryan. 16(4), 440–4 (Apr. 1973); CPM-7309D1156

Matora, I. M.—Probability of Spin Rotation of a Nonrelativistic Particle in a Inhomogeneous Magnetic Field (T)—I. M. Matora. 16(3), 349–50 (Mar. 1973); CPM-7306D0445

Matusevich, V. A.—Backward Scattering of Deutrons by Light Nuclei (E)—V. A. Matusevich, V. A. Solov'ev and I. P. Chernov. 15(4), 375–6 (Oct. 1972); CPM-7212D1920

Matveenko, A. V.—Method of Perturbed Stationary States (T)—A. V. Matveenko and L. N. Ponomarev. 16(3), 347–8 (Mar. 1973); CPM-7306D0443

Matveev, V. A.—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Asymptotic Estimates of the Quasipotential Parameters (T)—S. V. Goloskokov and V. A. Matveev. 16(6), 715–7 (Jun. 1973); CPM-7310E1563

Matvienko, V. I.—Search for Fission Isomers in the Radium Region (E)—I. M. Kuks, V. I. Matvienko, Yu. A. Nemilov, Yu. A. Selitskiĭ and V. B. Funshtein. 16(2), 244(L) (Feb. 1973); CPM-7304E0347

Mazarskiĭ, V. L.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Medelin, G. V.—Applicability of the Weizsäcker–Williams Approximation to Two–Photon Particle Production (T)—V. M. Budnev, I. F. Ginzburg, G. V. Medelin and V. G. Serbo. 16(2), 201–3 (Feb. 1973); CPM-7304E0304

Melnikov, V. N.—Quasiclassical Expansion and the Exponential Method (T)—V. A. Kolkunov and V. N. Melnikov. 16(5), 617–21 (May 1973); CPM-7309D1333

Merzon, G. I.—The Relativistic Rise in Ionization in Gas Track Detectors (T)—G. I. Merzon. 15(2), 157–60 (Aug. 1972); CPM-7210C1418

Meshkovskiĭ, A. G.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Mezentsev, L. N.—Neutron Yield and Fragment Kinetic Energy in Thermal-Neutron-Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Michalak, S.—Optical Radiation Excited by Nonrelativistic Charged Particles at Metal Surfaces (E)—A. P. Kobzev, S. Michalak, E. Rutkowski and I. M. Frank. 15(2), 184–8 (Aug. 1972); CPM-7210C1445

Migdal, A. B.—Remarks on the Analytic Properties of Wave Functions at Low Energies (T)—A. B. Migdal, A. M. Perelomov and V. S. Popov. 16(1), 120–1(L) (Jan. 1973); CPM-7304E0224

—Two Interacting Particles in a Potential Well (T)—A. B. Migdal. 16 (2), 238–41 (Feb. 1973); CPM-7304E0341

Mikaélyan, L. A.—Cross Sections and Spectra of Particles Appearing in Processes with the Participation of Reactor Antineutrinos (T)—L. A. Mikaélyan and S. A. Fayans. 15(5), 543–6 (Nov. 1972); CPM-7302E0069

Mikhailov, V. M.—Influence of Spin and Quadrupole Interactions on the Properties of the State with $K^{\pi} = 1^+$ in Deformed Even–Even Nuclei (T)—V. M. Mikhailov and V. V. Pogosyan. 16(2), 162–7 (Feb. 1973); CPM-7304E0265

Mikhailov, Yu. V.—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhailov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Mikhailova, M. A.—Splitting of the 5793 keV Doublet in the Ac^{225} α Spectrum (E)—N. A. Golovkov, B. S. Dzhelepov, R. B. Ivanov, M. A. Mikhailova and V. G. Chumin. 15(4), 349 (Oct. 1972); CPM-7212D1894

Mikhaleva, T. N.—Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha_1\gamma)Mg^{24}$ for 6.40–MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Mikheev, N. V.—Possible Effect of Diagonalization of High–Energy Electromagnetic Interactions with Respect to Particle Helicities (T)—É. M. Lipmanov and N. V. Mikheev. 16(6), 682–5 (Jun. 1973); CPM-7310E1530

Miroshnichenko, I. L.—Study of (γ, T) Resctions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Mirosidi, G. S.—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Mishchenko, V. M.—Mn^{54} Levels (E)—V. M. Mishchenko, A. I. Popov and V. E. Storizhko. 15(4), 343–6 (Oct. 1972); CPM-7212D1888

Mitin, A. A.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Mitrofanova, A. V.—Photofission and Photofragmentation of Tantalum (E)—V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 15(3), 228–31 (Sep. 1972); CPM-7211A1857

—Anisotropy in the Angular Distribution of Fragments from Photofission at High Energies (E)—N. A. Demëkhina, V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 16 (5), 502–4 (May 1973); CPM-7309D1218

Mitsel'makher, G. B.—On the Decay Mode $\mu^+ \to e^+\nu_e\bar{\nu}_\mu e^+e^-$ (T)—D. Yu. Bardin, Ts. G. Istatkov and G. B. Mitsel'makher. 15(2), 161–2 (Aug. 1972); CPM-7210C1422

Mkrtchyan, G. G.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+e^-n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Morozov, B. A.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. I. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Morozova, P. V.—Production of Fast Helium and Triton Nuclei in an Interaction of High–Energy Pions with Heavy Emulsion Nuclei (E)—A. I. Borisenko, A. P. Kazanskaya, P. V. Morozova, Zh. S. Takibaev and N. S. Titova. 15(4), 419–22 (Oct. 1972); CPM-7212D1964

Mosienko, A. M.—Charged Particle Distribution in Inelastic Proton–Neutron Interactions at 19.2 GeV/c (E)—É. G. Boos, B. O. Zhautykov, E. S. Lukin, A. M. Mosienko and R. A. Tursunov. 16(2), 187–8 (Feb. 1973); CPM-7304E0290

—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaitsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Mostepanenko, V. N.—Broken Symmetry in the K^0-Meson Theory and the Goldstone Theorem (T)—A. A. Grib and V. N. Mostepanenko. 15(3), 290–3 (Sep. 1972); CPM-7211A1919

Mrachkovskiĭ, O. M.—Searches for the Spontaneously Fissioning Isomer Pu^{240m} in the Thermal–Neutron Capture Reaction (E)—G. V. Val'skiĭ, O. M. Mrachkovskiĭ, G. A. Petrov and Yu. S. Pleva. 16(4), 374–5 (Apr. 1973); CPM-7309D1090

Mukhamedzhanov, A. M.—Peripheral Model for a Stripping Reaction to a Resonant State (T)—P. O. Dzhamalov, E. I. Dolinskiĭ and A. M. Mukhamedzhanov. 15(2), 147–53 (Aug. 1972); CPM-7210C1408

Mukhin, K. N.—The Reaction $\pi p \to \pi^- \pi^+ n$ at $p_\pi = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

—$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_\pi = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Makhrodova, T. I.—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhrodova, A. M. Mosienko, K. G. Zaĭtsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Mur, V. D.—Scattering of Fast Particles by an Effectively Growing Potential (T)—N. P. Kalashnikov and V. D. Mur. 16(5), 613–6 (May 1973); CPM-7309D1329

Muradyan, É. G.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma \approx 2$ and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Musakhanov, M. M.—Radiative Pion Capture by Hydrogen and Sign of Neutral Pion Decay Amplitude (E)—L. I. Lapidus and M. M. Musakhanov. 15(5), 558–60 (Nov. 1972); CPM-7302E0084

N

Nabichvrishvili, D. S.—Production of Slow Pions in Interactions between High Energy Particles and Nuclei (E)—N. I. Kostanashvili, G. I. Bebedevich, D. S. Nabichvrishvili and G. I. Kharashvili. 16(5), 542–5 (May 1973); CPM-7309D1258

Nadzhakov, E.—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Nagy, E.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Narodetskiĭ, I. M.—The Hilbert–Schmidt Expansion for Three–Particle Amplitudes (T)—I. M. Narodetskiĭ, E. S. Gal'pern and V. N. Lyakhovitskiĭ. 16(4), 395–9 (Apr. 1973); CPM-7309D1111

Nazarenko, V. A.—Nonconservation of P–Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoĭ, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Nechin, Yu. A.—Generation and Interaction of Muons with Energies $E_\mu \gtrsim 10^{12}$ eV (E)—G. B. Khristiansen, O. V. Vedenev and Yu. A. Nechin. 15(5), 538–42 (Nov. 1972); CPM-7302E0064

Nelyubin, V. V.—The Charge–Exchange Reaction $\pi^+\pi^- \to \pi^0\pi^0$ and the S Meson (E/T)—M. M. Makarov and V. V. Nelyubin. 16(4), 426–8 (Apr. 1973); CPM-7309D1142

Nemenov, L. L.—Atomic Decays of Elementary Particles (T)—L. L. Nemenov. 15(5), 582–4 (Nov. 1972); CPM-7302E0108

—Atomic Decays of K^0_L Mesons (T)—L. L. Nemenov. 16(1), 67–9 (Jan. 1973); CPM-7304E0171

—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Nemets, O. F.—Use of the Perturbed Angle $e_{\gamma\gamma\gamma}$ Correlation to Measure the Hg^{197} 133–keV State g–Factor (E)—N. D. Kornienko, B. G. Kul'Chinskiĭ, A. I. Levon and O. F. Nemets. 15(4), 353–6 (Oct. 1972); CPM-7212D1898

Nemilov, Yu. A.—Search for Fission Isomers in the Radium Region (E)—I. M. Kuks, V. I. Matvienko, Yu. A. Nemilov, Yu. A. Selitskiĭ and V. B. Punshtein. 16(2), 244(L) (Feb. 1973); CPM-7304E0347

Nersesov, É. A.—Conservation of the Isospin of Low–Lying Collective States of Heavy Nuclei (T)—É. A. Nersesov. 15(2), 121–3 (Aug. 1972); CPM-7210C1382

Nesterov, B. V.—Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamaliĭ, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Nesterov, V. G.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Nevskiĭ, P. L.—Muon Production in the Process $\nu_\mu + N \to \mu^- + W^+ + N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

—The Process $\nu_\mu + N \to \mu^- + W^+ + N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+ \to l^+ + \nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

Nguyen, Tack An—Angular Distribution of Neutrons Produced by Irradiating Ge, Mo, Ag, and Pr Targets with Heavy Ions of C, O, Ne, and Ar (E)—A. S. Il'inov, S. A. Karamyan, Tack An Nguyen and K. N. Sharifov. 16(3), 260–2 (Mar. 1973); CPM-7306D0356

Nguyen, Tak An—Energy Balance in Fission by Heavy Ions (E)—S. A. Karamyan, Tak An Nguyen and K. N. Sharifov. 15(3), 244–8 (Sep. 1972); CPM-7211A1873

Nguyen, Van Hieu—Remarks on the Nonuniqueness of the Effective Lagrangian in the Chiral SU(2) ⊗SU(2) Symmetry (T)—Van Hieu Nguyen. 15(5), 565–6 (Nov. 1972); CPM-7302E0091

Nguyen, Vin Kuang—Discrete Symmetries in Electrodynamics (T)—V. I. Strazhev and Vin Kuang Nguyen. 16(3), 343–6 (Mar. 1973); CPM-7306D0439

Nikitin, A. V.—Analysis of the $np \to pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaĭdalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Nikitin, V. A.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Nikitin, Yu. P.—Erratum: "Direct Production of Lepton Pairs by a Neutrino Beam in the Electromagnetic Field of a Nucleus [3, 497 (,4)] (T)—M. S. Marinov, Yu. P. Nikitin, Yu. P. Orevkov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu + Z \to \mu^- + W^+ + Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W^+ Boson in the Reaction $\nu+Z\to\mu^-+Z+W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Muon Production in the Process $\nu_\mu+N\to\mu^-+W^++N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

—The Process $\nu_\mu+N\to\mu^-+W^++N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+\to l^++\nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

—Scaling and Hydrodynamic Theory of Multiple Processes (E/T)—E. I. Daibog, Yu. P. Nikitin and I. L. Rozental'. 16(6), 724–6 (Jun. 1973); CPM-7310E1572

Nikityuk, L. N.—Probability of (μ^-,ν) Process on La^{139} and Pb^{204} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

Nikolaev, N. N.—Single Hyperon Production and Weak Decays of the $3/2^+$ Decuplet. —N. N. Nikolaev. 15(5), 547–8 (Nov. 1972); CPM-7302E0073

—Electromagnetic Interaction of the Muon and the $K_L\to2\mu$ Decay (T)—G. V. Grigoryan, N. N. Nikolaev and L. B. Okun'. 15(5), 554–5 (Nov. 1972); CPM-7302E0080

—Reactions of Single Σ and Λ Hyperon Production (E)—N. N. Nikolaev. 15(6), 687–90 (Dec. 1972); CPM-7302E0213

Nikolaev, V. M.—Some Peculiarities of Interaction of Ne^{20} and C^{12} Ions with Nuclei at 10–17 MeV/Nucleon (E)—V. M. Nikolaev and V. A. Shchegolev. 16(3), 263–5 (Mar. 1973); CPM-7306D0359

Nikolaevskiĭ, E. S.—Model of Reggeized One–Pion Exchange and the $pp\to pn\pi^+$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskiĭ and L. A. Ponomarev. 15 (2), 203–8 (Aug. 1972); CPM-7210C1464

Nikolina, A. A.—Angular Distribution of Low Energy Neutrons from Nuclear μ^- Capture in Sulfur and Calcium (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski, A. A. Nikolina and V. S. Roganov. 15(5), 523–5 (Nov. 1972); CPM-7302E0049

Nikol'skiĭ, S. I.—Development of Superhigh–Energy Electron–Photon Showers in the Atmosphere (T)—D. D. Krasil'nikov, V. P. Kulakovskaya and S. I. Nikol'skiĭ. 15(1), 47–50 (Jul. 1972); CPM-7209C0999

Nikyakiĭ, S. F.—Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p,\alpha_1\gamma)Mg^{24}$ for 6.40–MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Niledvin, S. D.—Partial Widths and Strong Coupling of Channels (T) —S. I. Grishanova, S. D. Niledvin, N. N. Titarenko and E. L. Yadrovskiĭ. 15(3), 264–5 (Sep. 1972); CPM-7211A1893

Nilov, A. F.—Investigation of the Reaction $\pi^-p\to p\eta$ and $\pi^-p\to p^0n$ at Incident Momentum 3–8 GeV/c by the Complex Angular Momentum Method (E)—V. N. Guzhavin, A. B. Kaidalov and A. F. Nilov. 15(1), 93–6 (Jul. 1972); CPM-7209C1045

Nomokonov, P. V.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Normuratov, F.—Measurement of Compound–Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

—Lifetimes of Excited Compound Nuclei in the Range $79<Z<89$, Measured by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, F. Normuratov and S. P. Tret'yakova. 16(3), 249–52 (Mar. 1973); CPM-7306D0345

Novikov, L. S.—Study of the Reaction $\pi^-+p\to n+m\gamma$ ($m\leq3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Investigation of $\pi^-+p\to n+6\gamma$ Reaction at 2.94 GeV/c (E)—L. S. Novikov. 15(3), 276–7 (Sep. 1972); CPM-7211A1905

Novikov, V. A.—Bounds on the Scattering Amplitudes at High Energies (T)—V. A. Novikov. 16(3), 337–9 (Mar. 1973); CPM-7306D0433

Nurpeisov, B.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Nyunin, M. I.—Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

O

Obukhov, Yu. V.—Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164

—Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

Oganesyan, Yu. Ts.—Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. É. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

—Measurement of Compound–Nucleus Lifetime by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, A. M. Kucher, F. Normuratov and Yu. Ts. Oganesyan. 16(2), 140–3 (Feb. 1973); CPM-7304E0243

—Average Number of Prompt Neutrons in the Spontaneous Fission of Fm^{256} (E)—M. Dakovskiĭ, Yu. A. Lazarev and Yu. Ts. Oganesyan. 16(6), 641–2 (Jun. 1973); CPM-7310E1489

Okolovich, V. N.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

—Po^{210} Fission in $Pb^{204}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

—Study of Phase Transition in the Density of the Excited States of Even–Even Pb Nuclei in the (α,f) Reaction (E)—V. N. Okolovich, M. G. Itkis, K. G. Kuvatov and G. N. Smirenkin. 16 (6), 631–3 (Jun. 1973); CPM-7310E1479

Okun', L. B.—Shrinkage Singularities and Asymptotic Behavior of the Weak Interaction Cross Section (T)—A. D. Dolgov, V. I. Zakharov and L. B. Okun'. 15(4), 451–6 (Oct. 1972); CPM-7212D1996

—Possible CPT–Breaking Effects and the Decay $K_L\to2\mu$ (T)—E. B. Bogomol'ny, A. D. Dolgov, V. I. Zakharov, L. B. Okun' and M. V. Terent'ev. 15(5), 549–53 (Nov. 1972); CPM-7302E0075

—Electromagnetic Interaction of the Muon and the $K_L\to2\mu$ Decay (T)—G. V. Grigoryan, N. N. Nikolaev and L. B. Okun'. 15(5), 554–5 (Nov. 1972); CPM-7302E0080

—The $K^0_L\to\mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyi, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

—$K_L\to2\mu$ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312

Ol'khovskiĭ, V. S.—Concerning the Description of Direct (n,2n) Processes in Some Nuclei (T)—S. N. Bzhov and V. S. Ol'khovskiĭ. 16(2), 185–6 (Feb. 1973); CPM-7304E0288

Omelaenko, A. S.—Recoil–Nucleon Polarization in Pion Photoproduction and Electroproduction (T)—A. S. Omelaenko. 15 (3), 304–6 (Sep. 1972); CPM-7211A1933

Onuchin, A. P.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Orevkov, Yu. P.—Erratum: "Direct Production of Lepton Pairs by a Neutrino Beam in the Electromagnetic Field of a Nucleus [3, 497 (,4)] (T)—M. S. Marinov, Yu. P. Nikitin, Yu. P. Orevkov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Orlova, N. V.—Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{17})C^{12}{}_{4.43}$, $B^{11}(\alpha,\ t_{17})C^{12}{}_{4.43}$, and $C^{12}(\alpha,\ \alpha_{17})C^{12}{}_{4.43}$ (E)—A. A. El-Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

Orlova, O. A.—Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. É. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

Ostroumov, V. I.—Investigation of (p,pd) –Reaction on Light Nuclei at 50 MeV (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 15(3), 239–40 (Sep. 1972); CPM-7211A1868

—The $O^{16}(p,\ p\alpha)C^{12}$ Reaction with 50–MeV Protons (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 16 (5), 497–8 (May 1973); CPM-7309D1213

Otroshchenko, G. A.—Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

—Angular Distributions of Fragments in Neutron–Induced Fission of Cf^{249} (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, G. A. Otroshchenko and V. A. Shigin. 16(4), 372–3 (Apr. 1973); CPM-7309D1088

—Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Ots, I.—Polarization Phenomena in Direct Reactions with Simple Diagrams Being Taken into Account (T)—I. Ots. 15(5), 515–9 (Nov. 1972); CPM-7302E0041

Ovcharenko, V. I.—Derivation of Bohr–Mottelson Collective Model Equations on the Basis of the Many–Body Problem Hamiltonian (T)—A. Ya. Dzyublik, V. I. Ovcharenko, A. I. Steshenko and G. F. Filippov. 15(5), 487–92 (Nov. 1972); CPM-7302E0013

Ovsyannikova, R. E.—Elastic Scattering of 26.6–MeV α Particles by Light Nuclei (E)—B. I. Kuznetsov, R. E. Ovsyannikova and I. P. Chernov. 15(4), 377–8 (Oct. 1972); CPM-7212D1922

P

Pakhtusova, E. V.—Observation of Double e^+e^- Pair Production (E) —V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Pal'shin, E. S.—Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Pan'yan, M. G.—Relative Yields of Xenon Isotopes in Np^{237} and Np^{238} Fission by Neutrons (E)—K. A. Petrzhak, M. G. Pan'yan, V. F. Teplykh and B. M. Aleksandrov. 15(5), 482–3 (Nov. 1972); CPM-7302E0008

Paramonova, I. N.—Energy Dependence of $\bar{\nu}$ in the Fission of U^{235} by Fast Neutrons (E)—M. V. Savin, Yu. A. Khokhlov, A. E. Savel'ev and I. N. Paramonova. 16(6), 638–40 (Jun. 1973); CPM-7310E1486

Pasechnik, M. V.—Level Density of Compound Nuclei with A = 130–200 and Other Nuclear Properties (E)—V. P. Vertebnyĭ, A. I. Kalchenko and M. V. Pasechnik. 16(1), 19–20 (Jan. 1973); CPM-7304E0123

Paskhalov, Yu. I.—Lateral Distribution of Electrons in an Inhomogeneous Atmosphere (T)—V. V. Guzhavin, I. P. Ivanenko and Yu. I. Paskhalov. 16(4), 417–20 (Apr. 1973); CPM-7309D1133

Paskhalov, Yu. P.—Angular and Spatial Distributions of Particles of Electron–Photon Shower Particles (T)—V. V. Guzhavin, I. P. Ivanenko, A. A. Kirillov and Yu. P. Paskhalov. 15(3), 278–81 (Sep. 1972); CPM-7211A1907

Pavlichenkov, I. M.—Accuracy of the K–Harmonics Method (T)—I. M. Pavlichenkov. 15(1), 24–7 (Jul. 1972); CPM-7209C0976

Pazsit, A.—Cross Sections of the Reactions $In^{113}(n,n')In^{113m}$ and $Rh^{103}(n,n')Rh^{103m}$ (E)—A. Pazsit and J. Csikzi. 15(3), 232–3 (Sep. 1972); CPM-7211A1861

Penev, I.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaitseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Penionzhkevich, Yu. É.—Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. É. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

Perelomov, A. M.—Remarks on the Analytic Properties of Wave Functions at Low Energies (T)—A. B. Migdal, A. M. Perelomov and V. S. Popov. 16(1), 120–1(L) (Jan. 1973); CPM-7304E0224

Perlovskiĭ, L. I.—Parton Model for $\gamma\gamma$ Scattering (T)—L. I. Perlovskiĭ and É. P. Kheifets. 15(4), 435–7 (Oct. 1972); CPM-7212D1980

Pershin, I. L.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Peshekhonov, V. D.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E) —V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Petrauskas, A.—Calculation of Nuclear Deformation of the U(3(A–1)) Scheme Model (T)—A. Petrauskas, G. Kamuntavicius and K. Jankauskas. 16(2), 168–72 (Feb. 1973); CPM-7304E0271

Petrov, G. A.—Searches for the Spontaneously Fissioning Isomer Pu^{240m} in the Thermal–Neutron Capture Reaction (E)—G. V. Val'skiĭ, O. M. Mrachkovskiĭ, G. A. Petrov and Yu. S. Pleva. 16 (4), 374–5 (Apr. 1973); CPM-7309D1090

Petrov, L. A.—Experiments Aimed at Finding Proton Decay from the Ground State (E)—D. D. Bogdanov, V. P. Bochin, V. A. Karnaukhov and L. A. Petrov. 16(5), 491–6 (May 1973); CPM-7309D1207

Petrov, N. M.—Factorization of Two–Particle t–Matrix and the Three–Nucleon Problem with a Gaussian Potential (T)—N. M. Petrov. 16(6), 733–6 (Jun. 1973); CPM-7310E1581

Petrukhin, A. I.—Total Cross Sections of the $\pi^\pm p$ and $\pi^\pm d$ Interactions in the Momentum Region 15–60 GeV/c and the Glauber Correction (E)—Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin and D. A. Stoyanova. 15(5), 530–3 (Nov. 1972); CPM-7302E0056

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhailov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Petrzhak, K. A.—Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15(1), 12–6 (Jul. 1972); CPM-7209C0964

—Relative Yields of Xenon Isotopes in Np^{237} and Np^{238} Fission by Neutrons (E)—K. A. Petrzhak, M. G. Pan'yan, V. F. Teplykh and B. M. Aleksandrov. 15(5), 482–3 (Nov. 1972); CPM-7302E0008

Pilipenko, Yu. K.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Pirogov, Yu. F.—Vacuum Exchange in the Triple Reggeon Region (T)—Yu. F. Pirogov. 16(3), 351–2(L) (Mar. 1973); CPM-7306D0447

Pleva, Yu. S.—Searches for the Spontaneously Fissioning Isomer Pu^{240m} in the Thermal-Neutron Capture Reaction (E)—G. V. Val'skii, O. M. Mrachkovskiĭ, G. A. Petrov and Yu. S. Pleva. 16 (4), 374–5 (Apr. 1973); CPM-7309D1090

Pleve, A. A.—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Podgoretskiĭ, M. I.—Correlations of Identical Particles Emitted by Highly Excited Nuclei (T)—G. I. Kopylov and M. I. Podgoretskiĭ. 15(2), 219–23 (Aug. 1972); CPM-7210C1480

Poenaru, D.—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Pogosyan, V. V.—Influence of Spin and Quadrupole Interactions on the Properties of the State with $K^{\pi}=1^{+}$ in Deformed Even–Even Nuclei (T)—V. M. Mikhailov and V. V. Pogosyan. 16(2), 162–7 (Feb. 1973); CPM-7304E0265

Pokrovskiĭ, V. N.—Probability of (μ^{-}, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

Pokrovskiĭ, Yu. E.—Use of the K-Harmonics Method for Spin–Orbit Splitting Calculations of Light Nuclei (T)—A. I. Baz', A. M. Gorbatov, V. F. Demin, Yu. E. Pokrovskiĭ and Yu. K. Rogov. 16 (2), 179–81 (Feb. 1973); CPM-7304E0282

Pol, Yu. S.—Analysis of Elastic Electron Scattering on Light Nuclei on the Basis of Symmetrized Fermi–Density Distribution (E/T)—Yu. N. Eldyshev, V. N. Lukyanov and Yu. S. Pol. 16(3), 282–6 (Mar. 1973); CPM-7306D0378

Pomorski, I.—Angular Distribution and Excitation Functions of the Reactions (N^{15}, N^{16}), (N^{14}, N^{16}), (N^{15}, N^{17}), (N^{14}, N^{17}) (E)—A. G. Artyukh, V. V. Volkov, L. Pomorski and J. Tys. 16(5), 499–501 (May 1973); CPM-7309D1215

Ponomarev, L. A.—Model of Reggeized One-Pion Exchange and the $pp \to pn\pi^{+}$ Reaction (T)—K. G. Boreskov, A. B. Kaidalov, V. I. Lisin, E. S. Nikolaevskiĭ and L. A. Ponomarev. 15(2), 203–8 (Aug. 1972); CPM-7210C1464

—Analysis of the $np \to pp\pi^{-}$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaidalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Ponomarev, L. N.—Method of Perturbed Stationary States (T)—A. V. Matveenko and L. N. Ponomarev. 16(3), 347–8 (Mar. 1973); CPM-7306D0443

Popeko, A. G.—Compound Nucleus Production by Accelerated Xenon Ions (E)—G. N. Flerov, S. A. Karamyan, G. S. Popeko, A. G. Popeko and I. A. Shelaev. 15(6), 618–9 (Dec. 1972); CPM-7302E0144

Popeko, G. S.—Compound Nucleus Production by Accelerated Xenon Ions (E)—G. N. Flerov, S. A. Karamyan, G. S. Popeko, A. G. Popeko and I. A. Shelaev. 15(6), 618–9 (Dec. 1972); CPM-7302E0144

Poplavskiĭ, I. V.—Inverse Problem in Complex λ Plane in the Presence of Coulomb Interaction with Allowance for Absorption (T)—V. V. Malyarov and I. V. Poplavskiĭ. 16(4), 483–5 (Apr. 1973); CPM-7309D1199

Popov, A. B.—Neutron Resonances of Sm Isotopes (E)—E. N. Karzhavina and A. B. Popov. 15(3), 225–7 (Sep. 1972); CPM-7211A1854

Popov, A. L.—Mn^{54} Levels (E)—V. M. Mishchenko, A. I. Popov and V. E. Storizhko. 15(4), 343–6 (Oct. 1972); CPM-7212D1888

Popov, S. L.—Construction of Physical Bases for the Groups O(5) and SU(3) with Automatic Performance of Symbolic Transformations (T)—V. N. Vinogradov, E. V. Gaĭ, S. I. Popov, N. S. Rabotnov and I. B. Shchenkov. 16(6), 647–52 (Jun. 1973); CPM-7310E1495

Popov, V. S.—Method for the Calculation of the Nuclear Critical Charge (T)—V. S. Popov. 15(5), 595–600 (Nov. 1972); CPM-7302E0121

—Pair Production in an Electromagnetic Field (Case of Arbitrary Spin) (T)—M. S. Marinov and V. S. Popov. 15(6), 702–9 (Dec. 1972); CPM-7302E0228

—Remarks on the Analytic Properties of Wave Functions at Low Energies (T)—A. B. Migdal, A. M. Perelomov and V. S. Popov. 16 (1), 120–1(L) (Jan. 1973); CPM-7304E0224

—$e^{+}e^{-}$ Pair Production in an Alternating Electric Field (T)—V. S. Popov and M. S. Marinov. 16(4), 449–56 (Apr. 1973); CPM-7309D1165

Potapov, V. S.—The Need for Taking into Account the Second-Order Terms of the Distorted Wave Method in the Three-Particle Scattering Problem (T)—V. S. Potapov. 16(1), 42–4 (Jan. 1973); CPM-7304E0146

Prokhorets, I. M.—Photodisintegration of He^{4} into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Prokhorov, L. V.—Equations for Effective Lagrangians (T)—L. V. Prokhorov. 16(4), 473–7 (Apr. 1973); CPM-7309D1189

Prokoshkin, Yu. D.—Total Cross Sections of the $\pi^{\pm}p$ and $\pi^{\pm}d$ Interactions in the Momentum Region 15–60 GeV/c and the Glauber Correction (E)—Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin and D. A. Stoyanova. 15(5), 530–3 (Nov. 1972); CPM-7302E0056

—Measurement of the Mean Life of the π^{+} Meson by an Oscillographic Method (E)—A. F. Dunaĭtsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaĭtsev, R. N. Krasnokutskiĭ, Yu. V. Mikhaĭlov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Pustovalov, V. V.—Matrix Elements for a Three Nucleon System in K-Harmonics Method (T)—V. V. Pustovalov. 15(4), 399–403 (Oct. 1972); CPM-7212D1944

—Potential Harmonics in the Three-Body Problem (T)—V. V. Pustovalov. 16(2), 176–8 (Feb. 1973); CPM-7304E0279

Pyatov, N. L.—Rotational Invariance, Moments of Inertia, and 1^{+} States in Deformed Nuclei (T)—N. I. Pyatov and M. I. Chernei. 16(5), 514–8 (May 1973); CPM-7309D1230

—Excitation of 0^{+} States in Two-Nucleon Transfer Reactions (E)—S. K. Abdulvagabova, S. P. Ivanova and N. I. Pyatov. 16(6), 665–9 (Jun. 1973); CPM-7310E1513

R

Rabinovich, A. D.—Fission of U^{235} by Thermal Neutrons (E)—V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich and V. A. Kostylev. 16(4), 364–71 (Apr. 1973); CPM-7309D1080

Rabotnov, N. S.—High-Spin Levels of Even–Even Nuclei in a Phenomenological Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 15(3), 262–3 (Sep. 1972); CPM-7211A1891

—E2 Transition Probabilities in the Asymmetric Rigid Rotor Model (T)—E. V. Gaĭ and N. S. Rabotnov. 15(4), 396–8 (Oct. 1972); CPM-7212D1941

—E2 Transitions and Quadrupole Moments of States with High Spin in the Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 16(1), 17–8 (Jan. 1973); CPM-7304E0121

—Probabilities of E2 Transitions and Mean Values of Quadrupole Moments of High Spin States in the Asymmetric Top Model (T)—E. V. Gaĭ and N. S. Rabotnov. 16(2), 159–61 (Feb. 1973); CPM-7304E0262

—Construction of Physical Bases for the Groups O(5) and SU(3) with Automatic Performance of Symbolic Transformations (T)—V. N. Vinogradov, E. V. Gaĭ, S. I. Popov, N. S. Rabotnov and I. B. Shchenkov. 16(6), 647–52 (Jun. 1973); CPM-7310E1495

Raichev, P. P.—Realization of the Physical Basis for Su(3) and the Probabilities of E1 Transitions in the Su(3) Formalism (T)—G. N. Afanas'ev, S. A. Abramov and P. P. Raichev. 16(1), 27–30 (Jan. 1973); CPM-7304E0131

—Parametrization of B(E2) Transitions in Deformed Even–Even Nuclei Within the Framework of the SU(3) Scheme (T/E)—P. P. Raichev. 16(6), 643–6 (Jun. 1973); CPM-7310E1491

Rakov, Yu. A.—Photoproduction of π^0 Mesons from Nucleons in the Complex Regge Pole Model (T)—N. P. Zotov, Yu. A. Rakov and V. A. Tsarev. 15(3), 307–8 (Sep. 1972); CPM-7211A1936

—Fixed Pole in the Virtual Compton–Effect Amplitude (T)—Yu. A. Rakov and V. A. Tsarev. 15(5), 574–5 (Nov. 1972); CPM-7302E0100

Ranft, G.—Phenomenological Study of Inclusive Single–Particle Spectra in the Triple Regge Limit (T)—G. Ranft and J. Ranft. 15 (3), 314–6 (Sep. 1972); CPM-7211A1943

Ranft, J.—Phenomenological Study of Inclusive Single–Particle Spectra in the Triple Regge Limit (T)—G. Ranft and J. Ranft. 15 (3), 314–6 (Sep. 1972); CPM-7211A1943

Ranyuk, Yu. N.—Photofission and Photofragmentation of Tantalum (E)—V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 15(3), 228–31 (Sep. 1972); CPM-7211A1857

—Anisotropy in the Angular Distribution of Fragments from Photofission at High Energies (E)—N. A. Demëkhina, V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 16 (5), 502–4 (May 1973); CPM-7309D1218

Rapoport, L. P.—Coulomb Green's Functions in the x–Representation and Relativistic Polarizability of a Hydrogen–Like Atom (T)—B. A. Zon, N. L. Manakov and L. P. Rapoport. 15(3), 282–6 (Sep. 1972); CPM-7211A1911

Razuvaev, E. A.—Measurement of the Mean Life of the π^+ Meson by an Oscillographic Method (E)—A. F. Dunaitsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhailov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Rekalo, A. P.—General Form of Cross Sections and Polarization Effects for Electromagnetic and Weak Processes (T)—A. P. Rekalo. 15(3), 300–3 (Sep. 1972); CPM-7211A1929

—Neutrino Electromagnetic and Weak Interactions and the Process $l^- + l^+ \to \nu + \bar{\nu} + \gamma$ (T)—A. P. Rekalo. 16(3), 309–10 (Mar. 1973); CPM-7306D0405

Reshetnikov, G. P.—Energy Dependence of Elastic Backward Scattering of Protons by Deuterons in the 360–670 MeV Range (E)—V. I. Komarov, G. E. Kosarev, G. P. Reshetnikov and O. V. Savchenko. 16(2), 129–33 (Feb. 1973); CPM-7304E0232

Rissukhin, V. K.—P–Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

Roganov, V. S.—Angular Distribution of Low Energy Neutrons from Nuclear μ^- Capture in Sulfur and Calcium (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski, A. A. Nikolina and V. S. Roganov. 15(5), 523–5 (Nov. 1972); CPM-7302E0049

—Neutron Energy Spectrum from Absorption of Negative Muons by O, S, Ca, and Pb Nuclei (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski and V. S. Roganov. 15(6), 639–44 (Dec. 1972); CPM-7302E0165

—Dependence of the Depolarization of Negative Muons on the Molecular Weight and Temperature in Organic Compounds (E)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov and V. S. Roganov. 16(1), 60–3 (Jan. 1973); CPM-7304E0164

—Depolarization of Negative Muons in Monomeric and Polymeric Organic Compounds (T)—A. A. Dzhuraev, V. S. Evseev, Yu. V. Obukhov, V. S. Roganov and N. I. Kholodov. 16(1), 64–6 (Jan. 1973); CPM-7304E0168

Rogov, Yu. K.—Use of the K–Harmonics Method for Spin–Orbit Splitting Calculations of Light Nuclei (T)—A. I. Baz', A. M. Gorbatov, V. F. Demin, Yu. E. Pokrovskiĭ and Yu. K. Rogov. 16 (2), 179–81 (Feb. 1973); CPM-7304E0282

Roinishvili, V.—Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Romanovskiĭ, E. A.—Proton Elastic Scattering by Ca Nuclei in the Energy Region 5.0–6.4 MeV (E)—E. A. Romanovskiĭ, E. I. Sirotinin, T. I. Spasskaya, K. S. Shishkin and V. D. Aleshin. 15(4), 365–6 (Oct. 1972); CPM-7212D1910

Romantseva, A. S.—The Reaction $\pi^- p \to \pi^- \pi^+ n$ at $p_\pi = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

—$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_\pi = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Rozanova, A. M.—Rescattering Effects in the pd→ppn Reaction (T)—B. M. Golovin, G. I. Lykasov, A. M. Rozanova and A. V. Tarasov. 16(5), 602–4 (May 1973); CPM-7309D1318

Rozental', I. L.—Scaling and Hydrodynamic Theory of Multiple Processes (E/T)—E. I. Daĭbog, Yu. P. Nikitin and I. L. Rozental'. 16(6), 724–6 (Jun. 1973); CPM-7310E1572

Rozhnov, G. V.—Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu + Z \to \mu^- + W^+ + Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Muon Production in the Process $\nu_\mu + N \to \mu^- + W^+ + N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

—The Process $\nu_\mu + N \to \mu^- + W^+ + N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+ \to l^+ + \nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

Rudak, E. A.—Doorway States of "Phonon + Particle" Type in (n, γ) Reactions on N=28 and N=82 Nuclei (E)—V. A. Knat'ko and E. A. Rudak. 15(6), 626–8 (Dec. 1972); CPM-7302E0152

Rumyantsev, B. A.—The Hydrodynamic Limit for Finite Fermi Systems (T)—B. A. Rumyantsev. 15(1), 28–30 (Jul. 1972); CPM-7209C0980

—Collective 0^+ and 2^+ States in Deformed Nuclei (T)—B. A. Rumyantsev and V. B. Telitsyn. 15(4), 387–91 (Oct. 1972); CPM-7212D1932

Rusakov, S. V.—Ionization Loss of High–Energy Electrons (E)—A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov and P. N. Shareiko. 16(2), 189–90 (Feb. 1973); CPM-7304E0292

Ruskina, G. Ya.—Po^{210} Fission in $Pb^{208}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

Rutkowski, E.—Optical Radiation Excited by Nonrelativistic Charged Particles at Metal Surfaces (E)—A. P. Kobzev, S. Michalak, E. Rutkowski and I. M. Frank. 15(2), 184–8 (Aug. 1972); CPM-7210C1445

Ryazanov, D. K.—Fission of U^{235} by Thermal Neutrons (E)—V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich and V. A. Kostylev. 16(4), 364–71 (Apr. 1973); CPM-7309D1080

Ryazhskaya, O. G.—Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Rybakov, V. N.—Probability of (μ^-, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

S

Sabo, V. Ya.—Baryons and Pseudoscalar Mesons in Broken Nonlinear Chiral SU(3) ×SU(3) Dynamics (T)—M. I. Gaisak and V. Ya. Sabo. 16(1), 109–11 (Jan. 1973); CPM-7304E0213

Safro, M. G.—Production of a Spin–J Resonance in the Dual Resonance Model (T)—L. V. Laperashvili and M. G. Safro. 15(5), 567–70 (Nov. 1972); CPM-7302E0093

Saidkhanov, N. Sh.—Coherent Diffraction Production of Pions by Photons in Photoemulsion Nuclei (E)—Sh. Abduzhamilov, S. A. Azimov, N. Sh. Saidkhanov and V. M. Chudakov. 15(2), 169–75 (Aug. 1972); CPM-7210C1430

Salganik, Yu. A.—Neutron Channel in μ^- Capture and Short—Range Nucleon–Nucleon Correlations. The Reaction $\mu^- + He^4H^3 + n + \nu$ (E)—Yu. A. Salganik and R. A. Éramzhyan. 15(3), 287–9 (Sep. 1972); CPM-7211A1916

Salomatin, Yu. I.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Sandach, A.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Sandor, L.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^-$ + (1, 2, 3, 4, 5) π^0 AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

San'ko, L. A.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15 (1), 38–43 (Jul. 1972); CPM-7209C0990

—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaitsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Sard, R. D.—Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roinishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Savchenko, O. V.—Energy Dependence of Elastic Backward Scattering of Protons by Deuterons in the 360–670 MeV Range (E)—V. I. Komarov, G. E. Kosarev, G. P. Reshetnikov and O. V. Savchenko. 16(2), 129–33 (Feb. 1973); CPM-7304E0232

Savel'ev, A. E.—The Hauser–Feshbach Method for Many Particle–Nuclear Reactions (T)—A. E. Savel'ev. 15(2), 154–6 (Aug. 1972); CPM-7210C1415

—Mechanism of (n,p) and (n,α) Reactions on Light and Medium Nuclei (E/T)—A. E. Savel'ev, I. K. Averiyanov and B. M. Dzyuba. 15(4), 416–8 (Oct. 1972); CPM-7212D1961

—Nucleon Pairing and Dependence of the Number of Prompt Neutrons on the Fragment Mass (T)—A. E. Savel'ev, S. V. Zhikhareva and M. A. Savel'eva. 16(1), 11–3 (Jan. 1973); CPM-7304E0115

—Energy Dependence of $\bar{\nu}$ in the Fission of U^{235} by Fast Neutrons (E)—M. V. Savin, Yu. A. Khokhlov, A. E. Savel'ev and I. N. Paramonova. 16(6), 638–40 (Jun. 1973); CPM-7310E1486

Savel'eva, M. A.—Nucleon Pairing and Dependence of the Number of Prompt Neutrons on the Fragment Mass (T)—A. E. Savel'ev, S. V. Zhikhareva and M. A. Savel'eva. 16(1), 11–3 (Jan. 1973); CPM-7304E0115

Savin, I. A.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Savin, M. V.—Energy Dependence of $\bar{\nu}$ in the Fission of U^{235} by Fast Neutrons (E)—M. V. Savin, Yu. A. Khokhlov, A. E. Savel'ev and I. N. Paramonova. 16(6), 638–40 (Jun. 1973); CPM-7310E1486

Savitskiĭ, G. A.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Savrin, V. I.—Connection of the Total Cross Section with the Diffraction Peak of Elastic Scattering (T)—V. I. Savrin, S. V. Semenov, N. E. Tyurin and O. A. Khrustalev. 16(2), 214–6 (Feb. 1973); CPM-7304E0317

Sazonov, V. N.—Possible Mass Anisotropy and Interaction of Ultra–High–Energy Particles with an Electromagnetic Field (T)—V. N. Sazonov. 15(5), 590–4 (Nov. 1972); CPM-7302E0116

Selitskiĭ, Yu. A.—Search for Fission Isomers in the Radium Region (E)—I. M. Kuks, V. I. Matvienko, Yu. A. Nemilov, Yu. A. Selitskiĭ and V. B. Funshtein. 16(2), 244(L) (Feb. 1973); CPM-7304E0347

Semenov, S. V.—Connection of the Total Cross Section with the Diffraction Peak of Elastic Scattering (T)—V. I. Savrin, S. V. Semenov, N. E. Tyurin and O. A. Khrustalev. 16(2), 214–6 (Feb. 1973); CPM-7304E0317

Serbo, V. G.—Applicability of the Weizsäcker–Williams Approximation to Two–Photon Particle Production (T)—V. M. Budnev, I. F. Ginzburg, G. V. Medelin and V. G. Serbo. 16(2), 201–3 (Feb. 1973); CPM-7304E0304

Serebryakov, V. V.—Dynamic Model for the 33 Phase Shift of πN Scattering (T)—A. N. Vall, Yu. H. Kafiev and V. V. Serebryakov. 16(1), 106–8 (Jan. 1973); CPM-7304E0210

Serednyakov, S. I.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Seregin, A. A.—High–Spin Levels of Even–Even Nuclei in a Phenomenological Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 15(3), 262–3 (Sep. 1972); CPM-7211A1891

—E2 Transitions and Quadrupole Moments of States with High Spin in the Collective Model (T)—A. P. Budnik, N. S. Rabotnov and A. A. Seregin. 16(1), 17–8 (Jan. 1973); CPM-7304E0121

Sergachev, A. I.—Influence of Excitation Energy on the Mass and Kinetic Energy Distributions of U^{233} Fission Fragments (E)—A. I. Sergachev, N. P. D'yachenko, A. M. Kovalev and B. D. Kuz'minov. 16(3), 266–9 (Mar. 1973); CPM-7306D0362

Sergeev, V. A.—Measurement of the Mean Life of the π^+ Meson by an Oscillographic Method (E)—A. F. Dunaitsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388

Severin, N. F.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

Shabalin, E. P.—Erratum: "Direct Production of Lepton Pairs by a Neutrino Beam in the Electromagnetic Field of a Nucleus [3, 497 (,4)] (T)—M. S. Marinov, Yu. P. Nikitin, Yu. P. Orevkov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Erratum: Neutral Currents and the Limit of Validity of the Theory of Weak Interactions [6, 603 (,4)] (T)—B. L. Ioffe and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu + Z \to \mu^- + W^+ + Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W+ Boson in the Reaction $\nu+Z\to\mu^-+Z+W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—P-odd Nuclear Forces and CP Violation in the Renormalizable Theory of Weak Interactions (T)—E. P. Shabalin. 15(4), 457–60 (Oct. 1972); CPM-7212D2002

—The Role of Corrections to the Weak Interaction in the $K\to l^+l^-$ and $K\to\pi l^+l^-$ Decays (T)—E. P. Shabalin. 16(2), 204–8 (Feb. 1973); CPM-7304E0307

Shabel'skiĭ, Yu. M.—Violation of Scale Invariance in Hadron Electroproduction Owing to the Cut Contribution (T)—Yu. M. Shabel'skiĭ. 16(1), 103–5 (Jan. 1973); CPM-7304E0207

Shabratova, G. S.—Interactions of 2.43–GeV/c Deuterons with Photographic Emulsion Nuclei (E)—E. Silesh, K. D. Tolstov, J. Tuček and G. S. Shabratova. 16(1), 57–9 (Jan. 1973); CPM-7304E0161

Shadchin, S. A.—Short–Range Nucleon–Nucleon Repulsion and Low–Energy Three–Nucleon Parameters (T)—V. F. Kharchenko, S. A. Shadchin and S. A. Storozhenko. 15(5), 493–6 (Nov. 1972); CPM-7302E0019

Shafranova, M. G.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Shakhnazaryan, Yu. G.—Electromagnetic Mechanism of Inelastic Hadron Collision at High Energies (T)—S. G. Matinyan, N. L. Ter–Isaakyan, V. A. Khoze and Yu. G. Shakhnazaryan. 16(4), 440–4 (Apr. 1973); CPM-7309D1156

Shakhova, Ts. I.—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Shalabaev, D. A.—Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_1)C^{12}{}_{4.43}$, $B^{11}(\alpha,t_{17})C^{13}{}_{4.43}$, and $C^{12}(\alpha,\alpha_{17})C^{12}{}_{4.43}$ (E)—A. A. El–Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

Shalatskiĭ, S. V.—Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

Shandor, L.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

Shapiro, I. S.—Quantum Theory Without the Superposition Principle (T)—I. S. Shapiro. 16(6), 727–32 (Jun. 1973); CPM-7310E1575

Sharapov, K. V.—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, E. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaitsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Shareiko, P. N.—Ionization Loss of High–Energy Electrons (E)—A. S. Belousov, E. I. Malinovskiĭ, S. V. Rusakov and P. N. Shareiko. 16(2), 189–90 (Feb. 1973); CPM-7304E0292

Sharifov, K. N.—Energy Balance in Fission by Heavy Ions (E)—S. A. Karamyan, Tak An Nguyen and K. N. Sharifov. 15(3), 244–8 (Sep. 1972); CPM-7211A1873

—Angular Distribution of Neutrons Produced by Irradiating Ge, Mo, Ag, and Pr Targets with Heavy Ions of C, O, Ne, and Ar (E)—A. S. Il'inov, S. A. Karamyan, Tack An Nguyen and K. N. Sharifov. 16(3), 260–2 (Mar. 1973); CPM-7306D0356

Shchegolev, V. A.—Some Peculiarities of Interaction of Ne^{20} and C^{12} Ions with Nuclei at 10–17 MeV/Nucleon (E)—V. M. Nikolaev and V. A. Shchegolev. 16(3), 263–5 (Mar. 1973); CPM-7306D0359

Shchenkov, I. B.—Construction of Physical Bases for the Groups O(5) and SU(3) with Automatic Performance of Symbolic Transformations (T)—V. N. Vinogradov, E. V. Gai, S. I. Popov, N. S. Rabotnov and I. B. Shchenkov. 16(6), 647–52 (Jun. 1973); CPM-7310E1495

Shebanov, V. A.—Study of the Reaction $\pi^-+p\to n+m\gamma$ ($m\leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

—Search for a Neutral Vector Meson in K_L Decays (E)—V. V. Barmin, G. V. Davidenko, V. S. Demidov, A. G. Dolgolenko, V. A. Matveev, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova, I. V. Chuvilo and V. A. Shebanov. 15(6), 636–7 (Dec. 1972); CPM-7302E0162

—Measurement of the Branching Ratio $\Gamma(K_L\to 3\pi^0)/\Gamma(K_L\to\pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Shelaev, I. A.—Compound Nucleus Production by Accelerated Xenon Ions (E)—G. N. Flerov, S. A. Karamyan, G. S. Popeko, A. G. Popeko and I. A. Shelaev. 15(6), 618–9 (Dec. 1972); CPM-7302E0144

Shelepin, L. A.—Problems of Reduction for Compact Groups (T)—I. M. Lizin and L. A. Shelepin. 15(1), 108–12 (Jul. 1972); CPM-7209C1060

—Cooperative Characteristics of Many–Particle Systems (T)—T. M. Makhviladze and L. A. Shelepin. 15(3), 335–40 (Sep. 1972); CPM-7211A1964

—Coherent States of Rotating Bodies (T)—T. M. Makhviladze and L. A. Shelepin. 15(5), 601–2 (Nov. 1972); CPM-7302E0127

Shevchenko, N. G.—Determination of the Charge Distribution Parameters of Ni^{60}, Zn^{64}, and Zn^{66} by Elastic Electron Scattering (E)—A. S. Litvinenko, N. G. Shevchenko, N. G. Afanas'ev, A. Yu. Buki, G. A. Savitskiĭ, V. M. Khvastunov, A. A. Khomich, I. I. Chkalov and V. P. Likhachev. 15(6), 611–3 (Dec. 1972); CPM-7302E0137

Shevchenko, V. A.—Differential Cross Sections and Angular Distributions of γ Rays from the (n,n'γ) Reaction on Pr^{141} and Ho^{165} (E)—E. A. Andreev, S. P. Sit'ko and V. A. Shevchenko. 15(5), 479–81 (Nov. 1972); CPM-7302E0005

Shifman, M. A.—The $K^0{}_L\to\mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyĭ, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

—The $K^0{}_L\to\mu\bar{\mu}$ Decay and the Anomalous $2\pi\gamma$–2μ Interaction (T)—M. A. Shifman and N. Zh. Shmatikov. 16(1), 77–9 (Jan. 1973); CPM-7304E0181

—Contribution of the $\pi^+\pi^-\gamma$ Intermediate State to the Absorptive Part of the $K^0{}_L\to\mu\bar{\mu}$ Decay Amplitude (T)—A. D. Dolgov, M. A. Shifman and M. Zh. Shmatikov. 16(1), 80–1 (Jan. 1973); CPM-7304E0184

Shigaev, O. E.—Mass Distribution of Products of Long–Range–Particle Fission (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(2), 119–20 (Aug. 1972); CPM-7210C1380

—Erratum: Mass Distribution of Products of Long–range–particle Fission [9, 427 (1962)] (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(4), 473–4 (Oct. 1972); CPM-7212D2018

Shigin, V. A.—Cf^{229} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

—Angular Distributions of Fragments in Neutron–Induced Fission of Cf^{249} (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, G. A. Otroshchenko and V. A. Shigin. 16(4), 372–3 (Apr. 1973); CPM-7309D1088

—Cross Sections for Neutron-Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Shishkin, K. S.—Proton Elastic Scattering by Ca Nuclei in the Energy Region 5.0–6.4 MeV (E)—E. A. Romanovskiĭ, E. I. Sirotinin, T. I. Spasskaya, K. S. Shishkin and V. D. Aleshin. 15(4), 365–6 (Oct. 1972); CPM-7212D1910

Shitikova, K. F.—Nature of the Intermediate Structure of Dipole Analog Resonances (T)—F. A. Zhivopistsev and K. F. Shitikova. 16(1), 21–4 (Jan. 1973); CPM-7304E0125

Shklyarevskiĭ, G. M.—Determination of the Neutron–Neutron Scattering Length from the Reaction $\pi^- d \to 2n + \gamma$ (T)—G. M. Shklyarevskiĭ. 16(6), 700–4 (Jun. 1973); CPM-7310E1548

Shmatikov, M. Zh.—The $K^0_L \to \mu^+ \mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyĭ, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

—Contribution of the $\pi^+\pi^-\gamma$ Intermediate State to the Absorptive Part of the $K^0_L \to \mu\bar{\mu}$ Decay Amplitude (T)—A. D. Dolgov, M. A. Shifman and M. Zh. Shmatikov. 16(1), 80–1 (Jan. 1973); CPM-7304E0184

Shmatikov, N. Zh.—The $K^0_L \to \mu\bar{\mu}$ Decay and the Anomalous $2\pi\gamma$–2μ Interaction (T)—M. A. Shifman and N. Zh. Shmatikov. 16(1), 77–9 (Jan. 1973); CPM-7304E0181

Shpakov, V. I.—Prompt Neutrons and Kinetic Energy of Fragments from Spontaneous Fission of Cm^{244} (E)—I. D. Alkhazov, S. S. Kovalenko, O. I. Kostochkin, L. Z. Malkin, K. A. Petrzhak and V. I. Shpakov. 15(1), 12–6 (Jul. 1972); CPM-7209C0964

Shubko, V. M.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, Yu. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

—Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

—Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Shuryak, É. V.—Multiparticle Production in High Energy Collisions (T)—É. V. Shuryak. 16(2), 220–5 (Feb. 1973); CPM-7304E0323

Shuvalov, R. S.—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhailov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Shvartsman, Sh. M.—Production of C–Even Resonances in Colliding ee Beams. Allowance for the Geometry of the Experiment in Two–Particle Decays (T)—A. K. Slivkov and Sh. M. Shvartsman. 16(4), 445–8 (Apr. 1973); CPM-7309D1161

Shvedchikov, A. V.—Polarization of 1000–MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznykov, O. Ya. Fedorov and A. V. Shvedchikov. 16(6), 628–30 (Jun. 1973); CPM-7310E1476

Shvetsov, I. K.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Sidorov, V. A.—Observation of Double e^+e^- Pair Production (E)—V. E. Balakin, A. D. Bukin, L. M. Kurdadze, A. P. Onuchin, E. V. Pakhtusova, S. I. Serednyakov, V. A. Sidorov and A. G. Khabakhpashev. 16(4), 407–9 (Apr. 1973); CPM-7309D1123

Sidorov, V. M.—Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15(1), 10–1 (Jul. 1972); CPM-7209C0962

Silesh, E.—Interactions of 2.43–GeV/c Deuterons with Photographic Emulsion Nuclei (E)—E. Silesh, K. D. Tolstov, J. Tuček and G. S. Shabratova. 16(1), 57–9 (Jan. 1973); CPM-7304E0161

Sil'vestrov, L. V.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Simonov, V. E.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Simonov, Yu. N.—Measurement of the Mean Life of the π^+ Meson by an Oscillographic Method (E)—A. F. Dunaitsev, Yu. D. Prokoshkin, E. A. Razuvaev, V. A. Sergeev and Yu. N. Simonov. 16(3), 292–7 (Mar. 1973); CPM-7306D0388

Sirotinin, E. I.—Proton Elastic Scattering by Ca Nuclei in the Energy Region 5.0–6.4 MeV (E)—E. A. Romanovskiĭ, E. I. Sirotinin, T. I. Spasskaya, K. S. Shishkin and V. D. Aleshin. 15(4), 365–6 (Oct. 1972); CPM-7212D1910

Sirunyan, A. M.—Photoproduction of Single π^+ Mesons on Nuclei at E_γ = 2 and 3 GeV. The Parameters of the Proton-Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Sitenko, A. G.—Scattering of High–Energy Electrons by H^3 and He^3 Nuclei (T)—A. G. Sitenko, I. V. Kozlovskiĭ and V. K. Tartakovskiĭ. 15(4), 406–9 (Oct. 1972); CPM-7212D1951

Sit'ko, S. P.—Differential Cross Sections and Angular Distributions of γ Rays from the $(n,n'\gamma)$ Reaction on Pr^{141} and Ho^{165} (E)—E. A. Andreev, S. P. Sit'ko and V. A. Shevchenko. 15(5), 479–81 (Nov. 1972); CPM-7302E0005

Skachkov, S. V.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Skakun, N. A.—Observation of Shadows in the Angular Distributions of Fragments from Photofission of Tantalum, and Evaluation of the Fission Lifetime (E)—N. A. Skakun and N. P. Dikiĭ. 15(3), 341–2(L) (Sep. 1972); CPM-7211A1970

Skobelev, N. K.—Delayed Fission of Some Neutron–Deficient Nuclei (T)—N. K. Skobelev. 15(3), 249–50 (Sep. 1972); CPM-7211A1878

Skobelev, V. V.—Modification of the Coulomb Law in a Uniform Static Magnetic Field (T)—Yu. M. Loskutov and V. V. Skobelev. 15(4), 433–4 (Oct. 1972); CPM-7212D1978

Skoryakov, A. M.—P–Odd Interaction in the $Cd^{113}(n,\gamma)Cd^{114}$ Reaction (E)—Yu. G. Abov, M. M. Danilov, O. N. Ermakov, I. L. Karpikhin, V. K. Rissukhin and A. M. Skornyakov. 16(6), 670–3 (Jun. 1973); CPM-7310E1518

Skorobogatov, P. V.—Nonadiabatic Theory of Rotational–Vibrational Excitations in Atomic Nuclei (T)—P. V. Skorobogatov. 15(2), 124–7 (Aug. 1972); CPM-7210C1385

Skorodumov, B. G.—Analysis of the Proton Spectrum from the D(n,p)2n Reaction (E)—B. G. Skorodumov, M. P. Gol'dberg and Yu. N. Talanin. 15(3), 234–8 (Sep. 1972); CPM-7211A1863

Slabospitskiĭ, R. P.—Study of Cl^{33} Excited States by Elastic Scattering of Polarized Protons by S^{32} (E)—I. D. Lopatko, V. I. Borovlev, G. B. Andreev and R. P. Slabospitskiĭ. 16(2), 127–8 (Feb. 1973); CPM-7304E0230

Slivkov, A. K.—Production of C–Even Resonances in Colliding ee Beams. Allowance for the Geometry of the Experiment in Two–Particle Decays (T)—A. K. Slivkov and Sh. M. Shvartsman. 16(4), 445–8 (Apr. 1973); CPM-7309D1161

Slowinski, B.—Cascade Curves and Fluctuations of Average Characteristics of the Development of Showers Produced by 1600–MeV γ Quanta in Liquid Xenon (E)—B. Slowinski, Z. Strugalski and W. Hubert. 16(4), 410–1 (Apr. 1973); CPM-7309D1126

Smelov, E. M.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

Smirenkin, G. N.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

—Structure of the One–Particle Spectrum and Energy Dependence of Γ_f/Γ_n (T)—A. V. Ignatyuk, G. N. Smirenkin and A. S. Tishin. 15(6), 622–5 (Dec. 1972); CPM-7302E0148

—Po^{210} Fission in $Pb^{206}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

—Study of Phase Transition in the Density of the Excited States of Even–Even Pb Nuclei in the (α, f) Reaction (E)—V. N. Okolovich, M. G. Itkis, K. G. Kuvatov and G. N. Smirenkin. 16(6), 631–3 (Jun. 1973); CPM-7310E1479

Smirin, L. N.—Lifetime of the 2.734–MeV Level of Sr^{88} (E)—D. K. Kaipov, Yu. G. Kosyak, L. N. Smirin and Yu. K. Subnyi. 15(6), 603–4 (Dec. 1972); CPM-7302E0129

Smirnov, G. I.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+ e^- n$ at $E_{\pi lab} = 275$ MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Smirnov, Yu. G.—Internal Bremsstrahlung Accompanying a Unique β Transition of Cs^{137} (E)—I. S. Batkin and Yu. G. Smirnov. 16(4), 405–6 (Apr. 1973); CPM-7309D1121

Smolin, D. A.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Smorodinskaya, N. Ya.—Polarization Effects in (p, 2p) Reaction (T)—V. M. Kolybasov and N. Ya. Smorodinskaya. 15(3), 269–72 (Sep. 1972); CPM-7211A1898

Smotritskiĭ, L. M.—Nonconservation of P–Parity in γ Decay of K^{41} (E)—B. M. Lobashov, V. A. Nazarenko, N. A. Bozovoĭ, L. M. Smotritskiĭ, G. I. Kharkevich and V. A. Knyaz'kov. 15(6), 632–5 (Dec. 1972); CPM-7302E0158

Sokolov, A. A.—Muon Production in the Process $\nu_\mu + N \to \mu^- + W^+ + N'$, Taking into Account the Neutrino Energy Spectrum (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(3), 304–8 (Mar. 1973); CPM-7306D0400

—The Process $\nu_\mu + N \to \mu^- + W^+ + N'$ and the Possibility of Detecting the W Boson from the Kinematic Characteristics of the Lepton from the Decay $W^+ \to l^+ + \nu_l$ (T)—V. V. Makeev, P. L. Nevskiĭ, Yu. P. Nikitin, G. V. Rozhnov and A. A. Sokolov. 16(6), 686–9 (Jun. 1973); CPM-7310E1534

Sokolov, V. V.—Chronological Products and Equal–Time Commutators in Perturbation Theory (T)—A. I. Vainshtein and V. V. Sokolov. 16(1), 112–6 (Jan. 1973); CPM-7304E0216

Sokolov, Yu. V.—Spin Dependence of the Density of the Particle–Hole State of Atomic Nuclei in the Fermi–Gas Model (T)—Yu. V. Sokolov. 16(1), 14–6 (Jan. 1973); CPM-7304E0118

—Density of Excited Particle Hole States in the Shell Model (E)—A. V. Ignatyuk and Yu. V. Sokolov. 16(2), 155–8 (Feb. 1973); CPM-7304E0258

Sokolovskiĭ, L. L.—De–Excitation of Even–Odd Nuclei in the Range $91 \leq N \leq 113$ After Capturing Thermal Neutrons (T)—L. V. Groshev, A. M. Demidov and L. L. Sokolovskiĭ. 16(3), 245–8 (Mar. 1973); CPM-7306D0341

Solov'ev, B. G.—On the Capability of Neutron Spectroscopy for the Study of Highly Excited States (Resonances) (T)—B. G. Solov'ev. 15(4), 410–5 (Oct. 1972); CPM-7212D1955

Solov'ev, V. A.—Backward Scattering of Deutrons by Light Nuclei (E)—V. A. Matusevich, V. A. Solov'ev and I. P. Chernov. 15(4), 375–6 (Oct. 1972); CPM-7212D1920

Solov'ev, V. G.—Magnetic Moments of Highly Excited States of Atomic Nuclei (T)—V. V. Voronov and V. G. Solov'ev. 16(6), 653–6 (Jun. 1973); CPM-7310E1501

Solov'ev, V. V.—The Decays $\eta \to \pi\pi\gamma$, $\eta \to 2\gamma$ and $\eta \to \pi\pi\gamma\gamma$ and the Form Factor of the Vector Current in K_{l4} Decay (T)—V. V. Solov'ev and M. V. Terent'ev. 16(1), 82–6 (Jan. 1973); CPM-7304E0186

Solov'eva, Z. I.—Mass Distribution of Products of Long–Range–Particle Fission (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(2), 119–20 (Aug. 1972); CPM-7210C1380

—Erratum: Mass Distribution of Products of Long–range–particle Fission [9, 427 (1962)] (T)—V. G. Bogdanov, Z. I. Solov'eva, O. E. Shigaev and V. S. Bychenkov. 15(4), 473–4 (Oct. 1972); CPM-7212D2018

—An Investigation of the (n, α) Reaction Between 4.9–MeV Neutrons and Light Nuclei of a Photographic Emulsion (E)—M. V. Kirichenko and Z. I. Solov'eva. 16(1), 9–10 (Jan. 1973); CPM-7304E0113

Sorokin, P. V.—Photofission and Photofragmentation of Tantalum (E)—V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 15(3), 228–31 (Sep. 1972); CPM-7211A1857

—Study of (γ, T) Reactions in Nuclei with Bremsstrahlung Energies up to 1200 MeV (E)—Yu. P. Antuf'ev, V. L. Agranovich, V. B. Ganenko, V. S. Kuz'menko, I. I. Miroshnichenko, P. V. Sorokin and S. V. Shalatskiĭ. 15(4), 357–60 (Oct. 1972); CPM-7212D1902

—Anisotropy in the Angular Distribution of Fragments from Photofission at High Energies (E)—N. A. Demëkhina, V. I. Kasilov, A. V. Mitrofanova, Yu. N. Ranyuk and P. V. Sorokin. 16(5), 502–4 (May 1973); CPM-7309D1218

Spasskaya, T. I.—Proton Elastic Scattering by Ca Nuclei in the Energy Region 5.0–6.4 MeV (E)—E. A. Romanovskiĭ, E. I. Sirotinin, T. I. Spasskaya, K. S. Shishkin and V. D. Aleshin. 15(4), 365–6 (Oct. 1972); CPM-7212D1910

Spasskiĭ, A. V.—Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{1,7})C^{12}_{4,43}$, $B^{11}(\alpha,t_{1,7})C^{12}_{4,43}$, and $C^{12}(\alpha,\alpha_{1,7})C^{12}_{4,43}$ (E)—A. A. El–Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

—The (α, t) Reaction in Li^7 and B^{11} (E)—O. I. Vasil'eva, N. V. Karabanov, V. M. Lebedev, A. V. Spasskiĭ and I. B. Teplov. 16(3), 257–9 (Mar. 1973); CPM-7306D0353

Starodubskiĭ, V. E.—Inclusion of Nucleon Correlations in the Glauber Picture of the Scattering of High–Energy Particles by Nuclei (T)—V. E. Starodubskiĭ. 16(5), 522–8 (May 1973); CPM-7309D1238

Staudenmaier, H. M.—Estimate of the ππ Scattering Length a_0 by the Method of Separating the Triangle Graph Contribution in the Reactions $\pi N \to \pi\pi N$ (T/E)—S. A. Bunyatov, V. S. Kurbatov, A. K. Likhoded and H. M. Staudenmaier. 16(6), 709–12 (Jun. 1973); CPM-7310E1557

Stepanets, L. N.—Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Stepula, E. V.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

—Inelastic Scattering of Electrons by Protons and Li^6 Nuclei (E)—Yu. I. Titov and E. V. Stepula. 15(4), 361–4 (Oct. 1972); CPM-7212D1906

Steshenko, A. I.—Derivation of Bohr–Mottelson Collective Model Equations on the Basis of the Many–Body Problem Hamiltonian (T)—A. Ya. Dzyublik, V. I. Ovcharenko, A. I. Steshenko and G. F. Filippov. 15(5), 487–92 (Nov. 1972); CPM-7302E0013

Storizhko, V. E.—Mn^{54} Levels (E)—V. M. Mishchenko, A. I. Popov and V. E. Storizhko. 15(4), 343–6 (Oct. 1972); CPM-7212D1888

Storozhenko, S. A.—Short-Range Nucleon-Nucleon Repulsion and Low-Energy Three-Nucleon Parameters (T)—V. F. Kharchenko, S. A. Shadchin and S. A. Storozhenko. 15(5), 493–6 (Nov. 1972); CPM-7302E0019

Stoyanova, D. A.—Total Cross Sections of the π^+p and π^+d Interactions in the Momentum Region 15–60 GeV/c and the Glauber Correction (E)—Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. I. Petrukhin, Yu. D. Prokoshkin and D. A. Stoyanova. 15(5), 530–3 (Nov. 1972); CPM-7302E0056

—Measurement of Total Cross Sections in the Momentum Region up to 65 BeV/c by a Hodoscopic Method (E)—Yu. B. Bushnin, Yu. P. Gorin, S. P. Denisov, S. V. Donskov, A. F. Dunaitsev, R. N. Krasnokutskiĭ, Yu. V. Mikhailov, A. I. Petrukhin, Yu. D. Prokoshkin, E. A. Razuvaev, D. A. Stoyanova and R. S. Shuvalov. 16(6), 674–7 (Jun. 1973); CPM-7310E1522

Strakhovenko, V. M.—Erratum: Higher-order Effects in External Field: Pair Production by a Particle [14, 572 (,5)] (T)—V. N. Baier, V. M. Katkov and V. M. Strakhovenko. 15(1), 118 (Jul. 1972); CPM-7209C1070

Strazhev, V. I.—Discrete Symmetries in Electrodynamics (T)—V. I. Strazhev and Vin Kuang Nguyen. 16(3), 343–6 (Mar. 1973); CPM-7306D0439

Strel'tsov, I. S.—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Strizhak, V. I.—Excitation of Collective States of Some Medium Nuclei by 14-MeV Neutrons (E)—B. E. Leshchenko, M. E. Gurtovoi, A. S. Kukhlenko and V. I. Strizhak. 15(1), 5–9 (Jul. 1972); CPM-7209C0957

Strugalski, Z.—Cascade Curves and Fluctuations of Average Characteristics of the Development of Showers Produced by 1600-MeV γ Quanta in Liquid Xenon (E)—B. Slowinski, Z. Strugalski and W. Hubert. 16(4), 410–1 (Apr. 1973); CPM-7309D1126

Struminskiĭ, B. V.—Application of the Methods of Statistical Mechanics to Dual Resonance Models (T)—G. P. Demchenko, V. V. Kukhtin and B. V. Struminskiĭ. 16(5), 511–3 (May 1973); CPM-7309D1227

Stryuk, Yu. S.—Analysis of Proton Angular Distributions in (α,p) Reactions with the Nuclei Si^{28}, P^{31}, Cl^{35}, Fe^{56}, Cu^{63} and Cu^{65} in the Three–Nucleon Stripping Theory (E)—Yu. S. Stryuk and V. V. Tokarevskiĭ. 15(6), 614–7 (Dec. 1972); CPM-7302E0140

Subnyĭ, Yu. K.—Lifetime of the 2.734-MeV Level of Sr^{88} (E)—D. K. Kaipov, Yu. G. Kosyak, L. N. Smirin and Yu. K. Subnyĭ. 15(6), 603–4 (Dec. 1972); CPM-7302E0129

Suetin, V. A.—$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_{\pi^-} = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Suleimanov, R. A.—Comparison of the Characteristics of the Interaction of Protons and Neutrons with C, Fe, and Pb Nuclei (E)—M. O. Azaryan, É. A. Mamidzhanyan, R. M. Martirosov and R. A. Suleimanov. 16(6), 678–81 (Jun. 1973); CPM-7310E1526

Sulkovskaya, M. M.—The Reaction $\pi^- p \to \pi^- \pi^+ n$ at $p_{\pi^-} = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

—$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_{\pi^-} = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Surovtsev, Yu. S.—Quasithreshold Behavior of the Amplitude of the Process $\pi + N \to N + (\text{Virtual } \gamma)$ (T)—Yu. S. Surovtsev and F. G. Tkebuchava. 16(6), 713–4 (Jun. 1973); CPM-7310E1561

Sustavov, A. F.—The Reaction $\pi^- p \to \pi^- \pi^+ n$ at $p_{\pi^-} = 4.45$ BeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, M. M. Sulkovskaya and A. F. Sustavov. 15(2), 166–8 (Aug. 1972); CPM-7210C1427

—$\pi^- p \to \pi^- \pi^0 p$ Reaction at $p_{\pi^-} = 4.45$ GeV/c (E)—A. A. Kartamyshev, K. N. Mukhin, A. S. Romantseva, V. A. Suetin, M. M. Sulkovskaya and A. F. Sustavov. 16(3), 298–9 (Mar. 1973); CPM-7306D0394

Sviridov, V. A.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

T

Takhtamyshev, G. G.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Takibaev, N. Zh.—Sum Rules for Potential Scattering (T)—D. A. Kirzhnits and N. Zh. Takibaev. 16(2), 242–3(L) (Feb. 1973); CPM-7304E0345

Takibaev, Zh. S.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

—Production of Fast Helium and Triton Nuclei in an Interaction of High-Energy Pions with Heavy Emulsion Nuclei (E)—A. I. Borisenko, A. P. Kazanskaya, P. V. Morozova, Zh. S. Takibaev and N. S. Titova. 15(4), 419–22 (Oct. 1972); CPM-7212D1964

—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaitsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Talanin, Yu. N.—Analysis of the Proton Spectrum from the D(n,p)2n Reaction (E)—B. G. Skorodumov, M. P. Gol'dberg and Yu. N. Talanin. 15(3), 234–8 (Sep. 1972); CPM-7211A1863

Tarasevich, S. V.—K–Meson Charge Exchange and Factorization of the Effective Residues of Complex Poles (T)—N. P. Zotov, S. V. Tarasevich and V. A. Tsarev. 15(2), 209–10 (Aug. 1972); CPM-7210C1470

Tarasov, A. V.—Double Charge Exchange of π Mesons on Nuclei at High Energies (T)—S. R. Gevorkyan, A. V. Tarasov and Ch. Tséren. 15(1), 34–7 (Jul. 1972); CPM-7209C0986

—Noncoherent Photoproduction of Vector Mesons on Nuclei at Large Momentum Transfers (T)—S. R. Gevorkyan and A. V. Tarasov. 15(2), 141–2 (Aug. 1972); CPM-7210C1402

—Radiation Corrections to the ep Scattering Cross Section at Small Angles with Detection of the Recoil Proton (T)—A. P. Vanzha, S. R. Gevorkyan and A. V. Tarasov. 16(2), 199–200 (Feb. 1973); CPM-7304E0302

—Electromagnetic Effects in Expolarization in Meson–Nucleon Scattering (T)—A. P. Vanzha, L. I. Lapidus and A. V. Tarasov. 16(5), 565–70 (May 1973); CPM-7309D1281

—Rescattering Effects in the pd→ppn Reaction (T)—B. M. Golovin, G. I. Lykasov, A. M. Rozanova and A. V. Tarasov. 16(5), 602–4 (May 1973); CPM-7309D1318

Tartakovskiĭ, V. K.—Dependence of the Electro–Excitation Cross Section of Some Light Nuclei on the Choice of the Coupling Scheme (T)—V. K. Tartakovskiĭ and A. V. Fursaev. 15(1), 31–3 (Jul. 1972); CPM-7209C0983

—Scattering of High–Energy Electrons by H^3 and He^3 Nuclei (T)—A. G. Sitenko, I. V. Kozlovskiĭ and V. K. Tartakovskiĭ. 15(4), 406–9 (Oct. 1972); CPM-7212D1951

—Two-Particle Electrodisintegration of He^3 (T)—I. V. Kozlovskiĭ, V. K. Tartakovskiĭ and A. D. Foursat. 16(3), 277–81 (Mar. 1973); CPM-7306D0373

Telitsyn, V. B.—Collective 0^+ and 2^+ States in Deformed Nuclei (T)—B. A. Rumyantsev and V. B. Telitsyn. 15(4), 387–91 (Oct. 1972); CPM-7212D1932

Temiraliev, T.—Analysis of the Angular and Energy Characteristics of Secondary Particles Produced in Proton–Proton Interactions at 10 BeV/c (E)—Zh. S. Takibaev, M. G. Antonova, É. G. Boos, D. I. Ermilova, L. A. San'ko, T. Temiraliev and A. V. Kholmetskaya. 15(1), 38–43 (Jul. 1972); CPM-7209C0990

Teplov, I. B.—Investigation of Angular Correlations in the Reactions $B^{10}(\alpha,d_{12})C^{12}_{4.43}$, $B^{11}(\alpha,t_{12})C^{12}_{4.43}$, and $C^{12}(\alpha,\alpha_{12})C^{12}_{4.43}$ (E)—A. A. El-Kamhavi, G. S. Gurevich, N. V. Orlova, A. V. Spasskiĭ, I. B. Teplov and D. A. Shalabaev. 15(3), 241–3 (Sep. 1972); CPM-7211A1870

—Structure Factor of Elastic α-Particle and Deuteron Scattering for the Heavy-Particle Stripping Mechanism (T)—T. A. Dmitrieva and I. B. Teplov. 15(3), 266–8 (Sep. 1972); CPM-7211A1895

—The (α, t) Reaction in Li^7 and B^{11} (E)—O. I. Vasil'eva, N. V. Karabanov, V. M. Lebedev, A. V. Spasskiĭ and I. B. Teplov. 16(3), 257–9 (Mar. 1973); CPM-7306D0353

Teplykh, V. F.—Relative Yields of Xenon Isotopes in Np^{237} and Np^{238} Fission by Neutrons (E)—K. A. Petrzhak, M. G. Pan'yan, V. F. Teplykh and B. M. Aleksandrov. 15(5), 482–3 (Nov. 1972); CPM-7302E0008

Terent'ev, M. V.—Possible CPT-Breaking Effects and the Decay $K_L \to 2\mu$ (T)—E. B. Bogomol'ny, A. D. Dolgov, V. I. Zakharov, L. B. Okun' and M. V. Terent'ev. 15(5), 549–53 (Nov. 1972); CPM-7302E0075

—Structure of Observable Amplitudes for Photon – "Soft" Pion Interaction (E)—M. V. Terent'ev. 15(6), 665–74 (Dec. 1972); CPM-7302E0191

—The Decays $\eta \to \pi\pi\gamma$, $\eta \to 2\gamma$ and $\eta \to \pi\pi\gamma\gamma$ and the Form Factor of the Vector Current in K_{l4} Decay (T)—V. V. Solov'ev and M. V. Terent'ev. 16(1), 82–6 (Jan. 1973); CPM-7304E0186

—Pion Polarizability, Virtual Compton Effect, and the Decay $\pi \to e\nu\gamma$ (T)—M. V. Terent'ev. 16(1), 87–93 (Jan. 1973); CPM-7304E0191

—The Sign of the $\pi^0 \to 2\gamma$ Electromagnetic Decay Constant (T)—M. V. Terent'ev. 16(5), 576–9 (May 1973); CPM-7309D1292

Ter-Isaakyan, N. L.—Electromagnetic Production of W-Meson Pairs (T)—N. L. Ter-Isaakyan and V. A. Khoze. 15(1), 51–5 (Jul. 1972); CPM-7209C1003

—Electromagnetic Mechanism of Inelastic Hadron Collision at High Energies (T)—S. G. Matinyan, N. L. Ter-Isaakyan, V. A. Khoze and Yu. G. Shakhnazaryan. 16(4), 440–4 (Apr. 1973); CPM-7309D1156

Ternov, I. M.—Induced Emission of Electrons in Plane Electromagnetic Waves (T)—I. M. Ternov and V. R. Khalilov. 16 (1), 94–8 (Jan. 1973); CPM-7304E0198

Tikhonin, F. F.—Muon Pair Production in μp Collisions (E)—M. N. Kobrinskiĭ and F. F. Tikhonin. 15(6), 685–6 (Dec. 1972); CPM-7302E0211

Tishin, A. S.—Structure of the One-Particle Spectrum and Energy Dependence of Γ_f/Γ_n (T)—A. V. Ignatyuk, G. N. Smirenkin and A. S. Tishin. 15(6), 622–5 (Dec. 1972); CPM-7302E0148

—Po^{210} Fission in $Pb^{208}(\alpha,f)$ Reaction (E)—M. G. Itkis, K. G. Kuvatov, V. N. Okolovich, G. Ya. Ruskina, G. N. Smirenkin and A. S. Tishin. 16(2), 144–50 (Feb. 1973); CPM-7304E0247

Titarenko, N. N.—Partial Widths and Strong Coupling of Channels (T)—S. I. Grishanova, S. D. Niledvin, N. N. Titarenko and E. L. Yadrovskiĭ. 15(3), 264–5 (Sep. 1972); CPM-7211A1893

—Knock-Out Reactions in Quasielastic and Antiquasielastic Kinematics (T)—V. V. Balashov, N. M. Kabachnik and N. N. Titarenko. 16(5), 622(L) (May 1973); CPM-7309D1338

Titov, Yu. I.—Electroproduction of Pions from Protons at Threshold for Momentum Transfers up to 10.4 F^{-2} (E/T)—Yu. I. Titov, N. F. Severin, N. G. Afanas'ev, R. V. Akhmerov, S. A. Byvalin, E. V. Stepula and E. M. Smelov. 15(3), 273–5 (Sep. 1972); CPM-7211A1902

—Inelastic Scattering of Electrons by Protons and Li^6 Nuclei (E)—Yu. I. Titov and E. V. Stepula. 15(4), 361–4 (Oct. 1972); CPM-7212D1906

Titova, N. S.—Production of Fast Helium and Triton Nuclei in an Interaction of High-Energy Pions with Heavy Emulsion Nuclei (E)—A. I. Borisenko, A. P. Kazanskaya, P. V. Morozova, Zh. S. Takibaev and N. S. Titova. 15(4), 419–22 (Oct. 1972); CPM-7212D1964

Tkebuchava, F. G.—Quasithreshold Behavior of the Amplitude of the Process $\pi + N \to N + (\text{Virtual } \gamma)$ (T)—Yu. S. Surovtsev and F. G. Tkebuchava. 16(6), 713–4 (Jun. 1973); CPM-7310E1561

Todorov, P.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Tokarevskiĭ, V. V.—Influence of Nonlocality on Inelastic α-Particle Scattering (T)—V. V. Tokarevskiĭ. 15(5), 503–7 (Nov. 1972); CPM-7302E0029

—Analysis of Proton Angular Distributions in (α,p) Reactions with the Nuclei Si^{28}, P^{31}, Cl^{35}, Fe^{56}, Cu^{63} and Cu^{65} in the Three-Nucleon Stripping Theory (E)—Yu. S. Stryuk and V. V. Tokarevskiĭ. 15(6), 614–7 (Dec. 1972); CPM-7302E0140

Tolstov, K. D.—Interactions of 2.43-GeV/c Deuterons with Photographic Emulsion Nuclei (E)—E. Silesh, K. D. Tolstov, J. Tuček and G. S. Shabratova. 16(1), 57–9 (Jan. 1973); CPM-7304E0161

Trebukhovskiĭ, Yu. V.—Study of the Reaction $\pi^- + p \to n + m\gamma$ ($m \leq 3$) at 2.94 GeV/c (E)—V. V. Barmin, V. M. Golubchikov, G. V. Davidenko, A. G. Dolgolenko, V. A. Ergakov, A. G. Meshkovskiĭ, L. S. Novikov, I. I. Pershin, S. V. Skachkov, Yu. V. Trebukhovskiĭ, T. A. Chistyakova and V. A. Shebanov. 15(2), 163–5 (Aug. 1972); CPM-7210C1424

Tret'yakova, S. P.—Lifetimes of Excited Compound Nuclei in the Range $79 < Z < 89$, Measured by Means of the Shadow Effect (E)—V. V. Kamanin, S. A. Karamyan, F. Normuratov and S. P. Tret'yakova. 16(3), 249–52 (Mar. 1973); CPM-7306D0345

Troyan, Yu. A.—Analysis of the $np \to pp\pi^-$ Reaction from the Point of View of a Reggeized OPE Model (E)—K. G. Boreskov, A. P. Gasparyan, A. B. Kaidalov, A. V. Nikitin, Yu. A. Troyan and L. A. Ponomarev. 15(3), 309–13 (Sep. 1972); CPM-7211A1938

Trubkin, Yu. A.—Influence of Single Scattering Processes on the Horizontal Fluxes of Cosmic Muons in Water (T)—A. T. Matachun, Yu. A. Trubkin and V. M. Fedorov. 16(2), 191–3 (Feb. 1973); CPM-7304E0294

Trusillo, S. V.—Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

Tsarev, V. A.—K-Meson Charge Exchange and Factorization of the Effective Residues of Complex Poles (T)—N. P. Zotov, S. V. Tarasevich and V. A. Tsarev. 15(2), 209–10 (Aug. 1972); CPM-7210C1470

—Photoproduction of π^0 Mesons from Nucleons in the Complex Regge Pole Model (T)—N. P. Zotov, Yu. A. Rakov and V. A. Tsarev. 15(3), 307–8 (Sep. 1972); CPM-7211A1936

—Fixed Pole in the Virtual Compton-Effect Amplitude (T)—Yu. A. Rakov and V. A. Tsarev. 15(5), 574–5 (Nov. 1972); CPM-7302E0100

—Allowance for the Cuts on the Basis of the Regge Complex Pole Model (T)—N. P. Zotov and V. A. Tsarev. 16(2), 226–8 (Feb. 1973); CPM-7304E0329

Tséren, Ch.—Double Charge Exchange of π Mesons on Nuclei at High Energies (T)—S. R. Gevorkyan, A. V. Tarasov and Ch. Tséren. 15(1), 34–7 (Jul. 1972); CPM-7209C0986

Tsipenyuk, Yu. M.—Measurement of the Excitation Energy of the Spontaneously Fissioning Isomer $Pu^{239}(\gamma,n)$ (E)—Yu. P. Gangrskiĭ, V. N. Markov, I. F. Kharisov and Yu. M. Tsipenyuk. 16(2), 151–4 (Feb. 1973); CPM-7304E0254

Tsugulea, M. N.—K_{13} Decays and Chiral Symmetry Breaking (T)—B. A. Magradze, M. N. Tsugulea and M. A. Éliashvili. 15(3), 294–5 (Sep. 1972); CPM-7211A1923

Tuček, J.—Interactions of 2.43-GeV/c Deuterons with Photographic Emulsion Nuclei (E)—E. Silesh, K. D. Tolstov, J. Tuček and G. S. Shabratova. 16(1), 57–9 (Jan. 1973); CPM-7304E0161

Turchin, Yu. M.—Neutron Yield and Fragment Kinetic Energy in Thermal-Neutron-Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeĭsov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Tursunov, R. A.—Charged Particle Distribution in Inelastic Proton–Neutron Interactions at 19.2 GeV/c (E)—É. G. Boos, B. O. Zhautykov, E. S. Lukin, A. M. Mosienko and R. A. Tursunov. 16(2), 187–8 (Feb. 1973); CPM-7304E0290

Tyrroff, H.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaĭtseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Tys, J.—Angular Distribution and Excitation Functions of the Reactions (N^{15}, N^{16}), (N^{14}, N^{16}), (N^{15}, N^{17}), (N^{14}, N^{17}) (E)—A. G. Artyukh, V. V. Volkov, L. Pomorski and J. Tys. 16(5), 499–501 (May 1973); CPM-7309D1215

Tyurin, N. E.—Connection of the Total Cross Section with the Diffraction Peak of Elastic Scattering (T)—V. I. Savrin, S. V. Semenov, N. E. Tyurin and O. A. Khrustalev. 16(2), 214–6 (Feb. 1973); CPM-7304E0317

Tyutin, I. V.—Quantization of Massive Gravitation (T)—I. V. Tyutin and E. S. Fradkin. 15(3), 331–4 (Sep. 1972); CPM-7211A1960

—The Theory of a Neutral Gauge Field with Spontaneous Symmetry Breaking (T)—I. V. Tyutin and E. S. Fradkin. 16(4), 464–72 (Apr. 1973); CPM-7309D1180

U

Ukhrin, Ya.—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Urvan, L.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

V

Vaĭnshteĭn, A. I.—Chronological Products and Equal-Time Commutators in Perturbation Theory (T)—A. I. Vainshtein and V. V. Sokolov. 16(1), 112–6 (Jan. 1973); CPM-7304E0216

Valkar, Sh.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Vall, A. N.—Dynamic Model for the 33 Phase Shift of πN Scattering (T)—A. N. Vall, Yu. H. Kaĭev and V. V. Serebryakov. 16(1), 106–8 (Jan. 1973); CPM-7304E0210

Val'skiĭ, G. V.—Searches for the Spontaneously Fissioning Isomer Pu^{240m} in the Thermal-Neutron Capture Reaction (E)—G. V. Val'skiĭ, O. M. Mrachkovskiĭ, G. A. Petrov and Yu. S. Pleva. 16(4), 374–5 (Apr. 1973); CPM-7309D1090

Vandlik, J.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaĭtseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Vandlik, T.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaĭtseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Vanzha, A. P.—Radiation Corrections to the ep Scattering Cross Section at Small Angles with Detection of the Recoil Proton (T)—A. P. Vanzha, S. R. Gevorkyan and A. V. Tarasov. 16(2), 199–200 (Feb. 1973); CPM-7304E0302

—Electromagnetic Effects in Expolarization in Meson–Nucleon Scattering (T)—A. P. Vanzha, L. I. Lapidus and A. V. Tarasov. 16(5), 565–70 (May 1973); CPM-7309D1281

Vartapetyan, G. A.—Photoproduction of Single π^+ Mesons on Nuclei at $E_\gamma \approx 2$ and 3 GeV. The Parameters of the Proton–Neutron Distribution (E)—L. O. Abramyan, A. O. Agan'yants, F. V. Adamyan, G. A. Vartapetyan, A. L. Bat'yan, S. R. Gevorkyan, V. D. Danielyan, N. A. Demekhina, M. Kh. Israelyan, G. Kh. Kazaryan, A. N. Lebedev, Zh. V. Manukyan, É. G. Muradyan, A. M. Sirunyan, A. G. Khudaverdyan and L. S. Khurshudyan. 16(4), 412–6 (Apr. 1973); CPM-7309D1128

Vashakidze, I. Sh.—Investigation of the Cluster Structure of the Be^8 Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(4), 382–5 (Apr. 1973); CPM-7309D1098

—The Cluster Model and the Structure of the C^{12} Nucleus (T)—I. Sh. Vashakidze and T. R. Dzhalaganiya. 16(5), 519–21 (May 1973); CPM-7309D1235

Vasil'ev, S. S.—Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha_1\gamma)Mg^{24}$ for 6.40-MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Vasil'eva, O. L.—The (α, t) Reaction in Li^7 and B^{11} (E)—O. L. Vasil'eva, N. V. Karabanov, V. M. Lebedev, A. V. Spasskiĭ and I. B. Teplov. 16(3), 257–9 (Mar. 1973); CPM-7306D0353

Vatset, P. I.—Photodisintegration of He^4 into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Vedeneev, O. V.—Generation and Interaction of Muons with Energies $E_\mu \gtrsim 10^{13}$ eV (E)—G. B. Khristiansen, O. V. Vedenev and Yu. A. Nechin. 15(5), 538–42 (Nov. 1972); CPM-7302E0064

Vel'berg, B. V.—Investigation of (p,pd) -Reaction on Light Nuclei at 50 MeV (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 15(3), 239–40 (Sep. 1972); CPM-7211A1868

—The $O^{16}(p, p\alpha)C^{12}$ Reaction with 50-MeV Protons (E)—V. V. Boĭkov, B. V. Vel'berg, I. I. Loshchakov and V. I. Ostroumov. 16(5), 497–8 (May 1973); CPM-7309D1213

Venkova, Ts.—Lifetimes of the Rotational Levels of Yb^{164} Measured by the Doppler Effect in the Recoil Nuclei (E)—B. Bochev, S. A. Karamyan, T. Kutsarova, Ya. Ukhrin, E. Nadzhakov, Ts. Venkova and R. Kalpakchieva. 16(4), 355–8 (Apr. 1973); CPM-7309D1071

Vertebnyĭ, V. P.—Level Density of Compound Nuclei with A=130–200 and Other Nuclear Properties (E)—V. P. Vertebnyĭ, A. I. Kalchenko and M. V. Pasechnik. 16(1), 19–20 (Jan. 1973); CPM-7304E0123

Vertogradov, L. S.—Estimate of Pion and Nucleon Form Factors from an Analysis of the Process $\pi^- p \to e^+e^-n$ at $E_{\pi lab}$=275 MeV (E)—S. F. Berezhnev, L. S. Vertogradov, A. V. Dem'yanov, A. V. Kulikov, A. V. Kuptsov, G. G. Mkrtchyan, L. L. Nemenov, G. I. Smirnov, D. M. Khazins and Yu. M. Chirkin. 16(1), 99–102 (Jan. 1973); CPM-7304E0203

Vestergombi, D.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Viktorov, D. V.—Cross-Sections for (n,2n) Reactions on Ga, As, Sm, Gd for 14.1 MeV Neutrons (E)—D. V. Viktorov and V. L. Zyablin. 15(6), 608–9 (Dec. 1972); CPM-7302E0134

Vil'gel'mova, L.—Probability of (μ^-, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

Vinitskiĭ, A. Kh.—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Vinogradov, V. B.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Vinogradov, V. N.—Construction of Physical Bases for the Groups O(5) and SU(3) with Automatic Performance of Symbolic Transformations (T)—V. N. Vinogradov, E. V. Gai, S. I. Popov, N. S. Rabotnov and I. B. Shchenkov. 16(6), 647–52 (Jun. 1973); CPM-7310E1495

Voinov, V. G.—Momentum Characteristics of Pion–Nucleon Interactions at 60 BeV (E)—Zh. S. Takibaev, I. Ya. Chasnikov, A. Kh. Vinitskiĭ, V. G. Voinov, Ts. I. Shakhova, I. S. Strel'tsov and Z. V. Anzon. 16(3), 300–3 (Mar. 1973); CPM-7306D0396

Voklov, E. L.—Fluctuations in Angular Distribution of Particles Produced at High Energies and Bimodality (T)—E. I. Voklov. 16 (3), 332–4 (Mar. 1973); CPM-7306D0428

Volkov, D. V.—U(4) Symmetry of Leptons and Quarks (T)—V. P. Akulov and D. V. Volkov. 15(4), 461–3 (Oct. 1972); CPM-7212D2006

Volkov, V. V.—Angular Distribution and Excitation Functions of the Reactions (N^{15}, N^{16}), (N^{14}, N^{16}), (N^{15}, N^{17}), (N^{14}, N^{17}) (E)—A. G. Artyukh, V. V. Volkov, L. Pomorski and J. Tys. 16(5), 499–501 (May 1973); CPM-7309D1215

Volkovitskiĭ, P. E.—Calculations of Shadow Effects in Proton–Deuteron Collisions (T)—V. V. Anisovich, P. E. Volkovitskiĭ and L. G. Dakhno. 15(1), 97–9 (Jul. 1972); CPM-7209C1049

Volodin, K. E.—Neutron Yield and Fragment Kinetic Energy in Thermal–Neutron–Induced Fission of Cf^{249} (E)—K. E. Volodin, V. G. Nesterov, B. Nurpeisov, G. N. Smirenkin, Yu. M. Turchin, V. N. Kosyakov, L. V. Chistyakov, I. K. Shvetsov, V. M. Shubko, L. N. Mezentsev and V. N. Okolovich. 15(1), 17–9 (Jul. 1972); CPM-7209C0969

Volod'ko, A. G.—Production of Pairs of Λ^0 Hyperons in Interactions of π^- Mesons with Carbon Nuclei at 5 GeV/c (E)—Y. A. Budagov, V. B. Vinogradov, A. G. Volod'ko, V. P. Dzhelepov, Zh. K. Karamyan, V. S. Kladnitskiĭ, Yu. F. Lomakin, G. Martinska, V. B. Flyagin and L. Shandor. 15(1), 44–6 (Jul. 1972); CPM-7209C0996

—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Voloshchuk, V. I.—Photodisintegration of He^4 into Two Deuterons (E)—Yu. M. Arkatov, P. I. Vatset, V. I. Voloshchuk, I. M. Prokhorets, A. F. Khodyachikh and V. I. Chmil. 16(1), 6–8 (Jan. 1973); CPM-7304E0110

Vongai, A. D.—Investigation of the Mirror Reactions (He^3, n) and (He^3, p) on the C^{12} Nucleus (E)—O. D. Brill', A. D. Vongaĭ, K. A. Gridnev and A. R. Faĭziev. 16(4), 359–63 (Apr. 1973); CPM-7309D1075

Voronov, V. V.—Magnetic Moments of Highly Excited States of Atomic Nuclei (T)—V. V. Voronov and V. G. Solov'ev. 16(6), 653–6 (Jun. 1973); CPM-7310E1501

Vorotnikov, P. E.—Cf^{249} Fission Cross Section in the Neutron Energy Range 0.16–1.6 MeV (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, V. N. Kosyakov, G. A. Otroshchenko, L. V. Chistyakov, V. A. Shigin and V. M. Shubko. 15(1), 20–1 (Jul. 1972); CPM-7209C0972

—Angular Distributions of Fragments in Neutron–Induced Fission of Cf^{249} (E)—P. E. Vorotnikov, B. M. Gokhberg, S. M. Dubrovina, G. A. Otroshchenko and V. A. Shigin. 16(4), 372–3 (Apr. 1973); CPM-7309D1088

—Cross Sections for Neutron–Induced Fission of Th^{228} (E)—P. E. Vorotnikov, Z. S. Gladkikh, A. V. Davydov, S. M. Dubrovina, G. A. Otroshchenko, E. S. Pal'shin, V. A. Shigin and V. M. Shubko. 16(5), 505–6 (May 1973); CPM-7309D1221

Vovchenko, V. G.—Polarization of 1000–MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznyakov, O. Ya. Fedorov and A. V. Shvedchikov. 16 (6), 628–30 (Jun. 1973); CPM-7310E1476

Vovenko, A. S.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15 (5), 534–7 (Nov. 1972); CPM-7302E0060

Vylkov, I.—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Vylkov, N.—Excitation Energies of the Spontaneously Fissile Isomers of Pu^{240}, Cm^{241}, and Bk^{243} in Reactions with α Particles (E)—I. Vylkov, N. Vylkov, Yu. P. Gangrskiĭ, M. Marinescu, A. A. Pleve, D. Poenaru and I. F. Kharisov. 16(3), 253–6 (Mar. 1973); CPM-7306D0349

Vylov, Ts.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaĭtseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

W

Weitsch, A.—Missing–Mass Spectra Observed in the Reaction $\pi^- + p \to p + X^-$ at 25 and 40 BeV/c (E)—Yu. M. Antipov, R. Busnello, A. Weitsch, G. Damgaard, F. A. Ech, M. N. Kienzle–Focacci, W. Kienzle, R. Klanner, L. G. Landsberg, A. A. Lebedev, C. Lechanoine, P. Lecomte, M. Martin, V. Roĭnishvili and R. D. Sard. 16(5), 550–3 (May 1973); CPM-7309D1266

Wojtkowska, I.—Angular Distribution of Low Energy Neutrons from Nuclear μ^- Capture in Sulfur and Calcium (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski, A. A. Nikolina and V. S. Roganov. 15(5), 523–5 (Nov. 1972); CPM-7302E0049

—Neutron Energy Spectrum from Absorption of Negative Muons by O, S, Ca, and Pb Nuclei (E)—I. Wojtkowska, V. S. Evseev, T. Kozlowski and V. S. Roganov. 15(6), 639–44 (Dec. 1972); CPM-7302E0165

Y

Yadrovskiĭ, E. L.—Partial Widths and Strong Coupling of Channels (T)—S. I. Grishanova, S. D. Niledvin, N. N. Titarenko and E. L. Yadrovskiĭ. 15(3), 264–5 (Sep. 1972); CPM-7211A1893

Yarba, V. A.—Formation of B^8 in Capture of Stopped π^- Mesons by Nitrogen Nuclei (E)—N. M. Agababyan, Yu. A. Batusov, S. A. Bunyatov, G. P. Gulkanyan, V. M. Sidorov and V. A. Yarba. 15 (1), 10–1 (Jul. 1972); CPM-7209C0962

Yatsyuk, V. G.—Investigation of the Reactions $\pi^- p \to n\pi^+\pi^- + (1, 2, 3, 4, 5)\ \pi^0$ AT 5 GeV/c (E)—Yu. A. Budagov, Sh. Valkar, V. B. Vinogradov, A. G. Volodko, V. P. Dzhelepov, V. S. Kladnitskiĭ, S. Kozhukhova, N. K. Koutsidi, Yu. F. Lomakin, G. Martinska, V. B. Flyagin, Yu. N. Kharzheev, L. Sandor and V. G. Yatsyuk. 15(6), 645–9 (Dec. 1972); CPM-7302E0171

Yen, Kim De—Production of Gold Isotopes in Bombardment of U^{238} by Xe^{136} Ions (E)—Yu. Ts. Oganesyan, O. A. Orlova, Yu. E. Penionzhkevich, K. A. Gavrilov and Kim De Yen. 16(2), 138–9 (Feb. 1973); CPM-7304E0241

Yuldashev, B. S.—Note Concerning the Symmetry of the Spectrum of the Longitudinal Pion Momenta in Semi–Inclusive $\pi^- p$ Interactions at p=4 GeV/c (E)—V. G. Grishin, Sh. V. Inogamov, B. S. Yuldashev and G. Jancso. 16(5), 611–2 (May 1973); CPM-7309D1327

Yushkov, A. V.—Shapes of Heavy Nuclei (T)—A. V. Yushkov. 16(4), 380–1 (Apr. 1973); CPM-7309D1096

Yutlandov, L. A.—Probability of (μ^-, ν) Process on La^{139} and Pb^{208} Nuclei (E)—G. G. Bunatyan, L. Vil'gel'mova, V. S. Evseev, L. N. Nikityuk, V. N. Pokrovskiĭ, V. N. Rybakov and I. A. Yutlandov. 15(5), 526–7 (Nov. 1972); CPM-7302E0052

Z

Zaĭtsev, A. M.—Some Comments on the Search for Quarks Using a 70 GeV Accelerator (T/E)—A. M. Zaĭtsev and L. G. Landsberg. 15(6), 656–64 (Dec. 1972); CPM-7302E0182

Zaĭtsev, K. G.—Study of Four Prong pp Interaction at a Momentum 19.1 GeV/c (E)—Zh. S. Takibaev, É. G. Boos, L. A. San'ko, T. I. Mukhordova, A. M. Mosienko, K. G. Zaitsev and K. V. Sharapov. 16(5), 537–41 (May 1973); CPM-7309D1253

Zaĭtseva, N. G.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaitseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Zajacki, V. J.—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Zakharov, V. I.—Shrinkage Singularities and Asymptotic Behavior of the Weak Interaction Cross Section (T)—A. D. Dolgov, V. I. Zakharov and L. B. Okun'. 15(4), 451–6 (Oct. 1972); CPM-7212D1996

—Possible CPT–Breaking Effects and the Decay $K_L \to 2\mu$ (T)—E. B. Bogomol'ny, A. D. Dolgov, V. I. Zakharov, L. B. Okun' and M. V. Terent'ev. 15(5), 549–53 (Nov. 1972); CPM-7302E0075

—The $K^0_L \to \mu^+\mu^-$ Decay and a Possible Anomalous Muon–Hadron Interaction (T)—E. B. Bogomol'nyĭ, A. D. Dolgov, V. I. Zakharov, L. B. Okun', M. A. Shifman and M. Zh. Shmatikov. 16(1), 70–6 (Jan. 1973); CPM-7304E0174

—$K_L \to 2\mu$ Decay and the Possible Existence of a Light Vector Meson (T)—A. D. Dolgov, A. G. Dolgolenko, V. I. Zakharov and L. B. Okun'. 16(2), 209–13 (Feb. 1973); CPM-7304E0312

Zakharova, V. P.—Fission of U^{233} by Thermal Neutrons (E)—V. P. Zakharova, D. K. Ryazanov, B. G. Basova, A. D. Rabinovich and V. A. Kostylev. 16(4), 364–71 (Apr. 1973); CPM-7309D1080

Zamiralov, V. S.—Continuous Sum Rules and Asymptotic Total πN Interaction Cross Sections (E)—Z. R. Babaev and V. S. Zamiralov. 16(6), 718–9 (Jun. 1973); CPM-7310E1566

Zanevskiĭ, Yu. V.—Transmission Regeneration of Neutral K Mesons on Hydrogen in the Momentum Region 14–42 GeV/c (E)—V. K. Birulev, A. S. Vovenko, D. Vestergombi, N. N. Govorun, L. B. Golovanov, I. A. Golutvin, T. S. Grigalashvili, B. N. Gus'kov, Yu. V. Zanevskiĭ, I. M. Ivanchenko, V. G. Krivokhizhin, V. V. Kukhtin, D. Kiss, M. F. Likhachev, A. L. Lyubimov, V. L. Mazarskiĭ, A. A. Mitin, E. Nagy, V. D. Peshekhonov, I. A. Savin, Yu. I. Salomatin, V. E. Simonov, L. V. Sil'vestrov, D. A. Smolin, G. G. Takhtamyshev, P. Todorov, L. Urvan and N. G. Fadeev. 15(5), 534–7 (Nov. 1972); CPM-7302E0060

Zaslavskiĭ, A. N.—Determination of the Spin–Parity of the $X^0(960)$ Meson in Proton–Antiproton Annihilation at Rest (E)—L. É. Genina, A. N. Zaslavskiĭ and R. Lednicky. 15(5), 571–3 (Nov. 1972); CPM-7302E0097

—Dispersion Relations and Data on the Reaction $\gamma n \to p\pi^-$ in the 33 Resonance Region (T)—I. G. Aznauryan and A. N. Zaslavskiĭ. 15(6), 696–8 (Dec. 1972); CPM-7302E0222

—Chiral Su(2) $\times$Su(2) Dynamics and the $\pi^+ p \to p^0 \Delta^{++}_{1236}$ Reaction Close to the Threshold (T/E)—A. N. Zaslavskiĭ and R. Lednicky. 16(2), 232–7 (Feb. 1973); CPM-7304E0335

Zatsepin, G. T.—Investigation of Underground Nuclear Interactions of Cosmic Ray Muons (E)—I. B. Bezrukov, V. I. Beresnev, G. T. Zatsepin, M. I. Nyunin, O. G. Ryazhskaya and L. N. Stepanets. 15(2), 176–83 (Aug. 1972); CPM-7210C1437

Zayachki, V. I.—The Real Part of the Amplitude for Elastic pd–Scattering at an Energy of 70 GeV (E)—V. I. Zayachki, L. G. Khristov, Z. M. Zlatanov and P. A. Devenski. 15(5), 528–9 (Nov. 1972); CPM-7302E0054

—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

Zayats, A. A.—($\pi\Delta$) Photoproduction on Protons at γ-Quantum Energies 0.6–1 GeV (E)—A. A. Zayats. 16(5), 597–601 (May 1973); CPM-7309D1313

Zazulin, V. S.—Correlation of α Particles and γ Rays from the Reaction $Al^{27}(p, \alpha_1\gamma)Mg^{24}$ for 6.40-MeV Protons (E)—S. S. Vasil'ev, A. S. Dem'yanova, V. S. Zazulin, S. D. Kostyuchenkov, T. N. Mikhaleva, S. F. Nikyakiĭ and D. L. Chupronov. 15(4), 367–8 (Oct. 1972); CPM-7212D1912

Zelevinskiĭ, V. G.—Method of Generalized Density Matrix in the Theory of Collective Excitations (T)—S. T. Belyaev and V. G. Zelevinskiĭ. 16(6), 657–64 (Jun. 1973); CPM-7310E1505

Zemtsev, B. V.—Gamma Radiation in Intermediate Neutron Radioactive Capture (E)—A. F. Gamaliĭ, B. V. Zemtsev, V. B. Ivanov, B. V. Nesterov and L. P. Kham'yanov. 15(1), 1–4 (Jul. 1972); CPM-7209C0953

Zhautykov, B. O.—Charged Particle Distribution in Inelastic Proton–Neutron Interactions at 19.2 GeV/c (E)—É. G. Boos, B. O. Zhautykov, E. S. Lukin, A. M. Mosienko and R. A. Tursunov. 16(2), 187–8 (Feb. 1973); CPM-7304E0290

Zhdanov, A. A.—Polarization of 1000–MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznyakov, O. Ya. Fedorov and A. V. Shvedchikov. 16(6), 628–30 (Jun. 1973); CPM-7310E1476

Zhelev, Zh.—Investigation of the Decay of Tl^{194} (E)—B. Amov, T. Vandlik, J. Vandlik, Ts. Vylov, Zh. Zhelev, N. G. Zaitseva, I. Penev and H. Tyrroff. 16(5), 487–90 (May 1973); CPM-7309D1203

Zheleznyakov, V. M.—Polarization of 1000–MeV Protons Scattered by Be, C, Al, and Pb Nuclei (E)—V. G. Vovchenko, A. A. Zhdanov, V. M. Zheleznyakov, O. Ya. Fedorov and A. V. Shvedchikov. 16(6), 628–30 (Jun. 1973); CPM-7310E1476

Zhidkov, N. K.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Zhikhareva, S. V.—Nucleon Pairing and Dependence of the Number of Prompt Neutrons on the Fragment Mass (T)—A. E. Savel'ev, S. V. Zhikhareva and M. A. Savel'eva. 16(1), 11–3 (Jan. 1973); CPM-7304E0115

Zhivopistsev, F. A.—Nature of the Intermediate Structure of Dipole Analog Resonances (T)—F. A. Zhivopistsev and K. F. Shitikova. 16(1), 21–4 (Jan. 1973); CPM-7304E0125

Zhizhin, E. D.—Erratum: Angular and Momentum Distributions of μ^- Mesons in the Reaction $\nu + Z \to \mu^- + W^+ + Z$ [14, 235 (,2)] (T)—E. D. Zhizhin, Yu. P. Nikitin, G. V. Rozhnov and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

—Erratum: Angular and Momentum Distributions of μ^+ Mesons Resulting from the Decay of the W^+ Boson in the Reaction $\nu + Z \to \mu^- + Z + W^+$ [14, 236 (,2)] (T)—A. V. Berkov, E. D. Zhizhin, Yu. P. Nikitin and E. P. Shabalin. 15(1), 118 (Jul. 1972); CPM-7209C1070

Zhukov, M. V.—A Model for the Equations of Nuclear Physics (T)—A. I. Baz' and M. V. Zhukov. 16(1), 31–7 (Jan. 1973); CPM-7304E0135

—Model of the Equations of Nuclear Physics. One Decay Channel (T)—A. I. Baz' and M. V. Zhukov. 16(5), 529–36 (May 1973); CPM-7309D1245

Zhukova, O. A.—Nuclear Reactions Produced by α Particles on Co^{59} Nuclei (E)—O. A. Zhukova, V. I. Kanashevich, S. V. Laptev and G. P. Chursin. 16(2), 134–7 (Feb. 1973); CPM-7304E0237

Zima, V. G.—Photoproduction of Electron–Positron Pairs (T)—V. G. Zima. 16(5), 580–3 (May 1973); CPM-7309D1296

Zimina, O. V.—Asymmetry of Nuclear Fission with Allowance for Quantum Effects (T)—B. T. Geilikman and O. V. Zimina. 15(3), 256–9 (Sep. 1972); CPM-7211A1885

Zlatanov, Z. M.—The Real Part of the Amplitude for Elastic pd–Scattering at an Energy of 70 GeV (E)—V. I. Zayachki, L. G. Khristov, Z. M. Zlatanov and P. A. Devenski. 15(5), 528–9 (Nov. 1972); CPM-7302E0054

Zolin, L. S.—Investigation of Elastic pd Scattering in the Diffraction Cone Region in the Energy Range 10–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Buyak, N. K. Zhidkov, V. I. Zayachki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyong B'en and M. G. Shafranova. 15(6), 650–3 (Dec. 1972); CPM-7302E0176

—Investigation of Elastic Proton–Proton Scattering in the Region of the Interference of the Coulomb and the Nuclear Interactions in the Energy Interval 8–70 GeV (E)—V. D. Bartenev, G. G. Beznogikh, A. Bujak, N. K. Zhidkov, V. J. Zajacki, L. S. Zolin, L. F. Kirillova, B. A. Morozov, V. A. Nikitin, P. V. Nomokonov, Yu. K. Pilipenko, A. Sandach, V. A. Sviridov, Chyung Bien and M. G. Shafranova. 16(1), 50–6 (Jan. 1973); CPM-7304E0154

Zombkovskaya, N. K.—Measurement of the Branching Ratio $\Gamma(K_L \to 3\pi^0)/\Gamma(K_L \to \pi^+\pi^-\pi^0)$ (E)—V. V. Barmin, V. G. Barylov, G. D. Davidenko, V. S. Demidov, A. G. Dolgolenko, N. K. Zombkovskaya, A. G. Meshkovskiĭ, G. S. Mirosidi, T. A. Chistyakova and V. A. Shebanov. 15(6), 638 (Dec. 1972); CPM-7302E0164

Zon, B. A.—Coulomb Green's Functions in the x-Representation and Relativistic Polarizability of a Hydrogen-Like Atom (T)—B. A. Zon, N. L. Manakov and L. P. Rapoport. 15(3), 282–6 (Sep. 1972); CPM-7211A1911

Zotov, N. P.—K-Meson Charge Exchange and Factorization of the Effective Residues of Complex Poles (T)—N. P. Zotov, S. V. Tarasevich and V. A. Tsarev. 15(2), 209–10 (Aug. 1972); CPM-7210C1470

—Photoproduction of π^0 Mesons from Nucleons in the Complex Regge Pole Model (T)—N. P. Zotov, Yu. A. Rakov and V. A. Tsarev. 15(3), 307–8 (Sep. 1972); CPM-7211A1936

—Allowance for the Cuts on the Basis of the Regge Complex Pole Model (T)—N. P. Zotov and V. A. Tsarev. 16(2), 226–8 (Feb. 1973); CPM-7304E0329

Zvenigorodskiĭ, A. G.—Levels and γ Transitions in Cu^{64} from the Reaction $Ni^{64}(p,n\gamma)Cu^{64}$ (E)—B. Ya. Guzhovskiĭ, S. N. Abramovich, A. G. Zvenigorodskiĭ and S. V. Trusillo. 16(2), 123–6 (Feb. 1973); CPM-7304E0226

Zyablin, V. L.—Cross-Sections for (n,2n) Reactions on Ga, As, Sm, Gd for 14.1 MeV Neutrons (E)—D. V. Viktorov and V. L. Zyablin. 15(6), 608–9 (Dec. 1972); CPM-7302E0134

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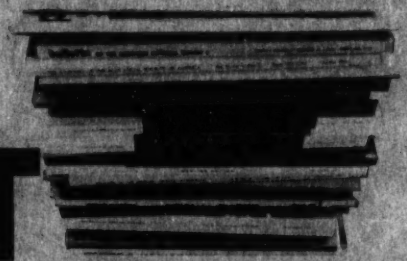

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